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ABSTRACT

Based on the first survey of adult education in the public school system to be conducted by the U.S. Office of Education since 1958, the findings reported here show that adult education is growing faster than any other level of education and that there are more students in public adult education (defined here to include elementary and secondary schools and public community and junior colleges) than in higher education. An introductory chapter provides notes on the use of rankings and of rank-difference correlations in the survey in relationship to earlier State-by-State universe studies. Chapter 2 summarizes the findings of past surveys, which were selected to be pertinent to the data collected and to provide a context that would serve as a guide to understanding the current statistics, particularly in helping to detect trends. Chapter 3 presents description of survey design, administration, and analysis involving statistics on the number of full-time and part-time students and instructors within each State and territory. Chapter 4 presents the data and draws tentative conclusions and hypotheses, noting trends and observations about program sponsors, enrollments, instructional staff, ration of enrollment to staff, and purposes of programs. Chapter 5 summarizes the whole, and chapter 6 presents conclusions on the state of public adult education with thoughts on developments for the future and policy decisions required. (JT)

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Adult Education in the Public School Systems 1968-69 and 1969-70

The Complete Report

with

Historical, Analytical and Comparative Findings

By

IMOGENE E. OKES

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THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE
WASHINGTON, D. C. 20201

Foreword

It is a pleasure for me to contribute–however slightly–to one of the many significant publications that are produced each year by the talented men and women of the Department of Health, Education, and Welfare. I hope that readers of this report will be encouraged to investigate the hundreds of other titles which are produced for the public by the operating agencies of this Department.

Adult Education in the Public Education Systems is an area which this Department has long supported, but which has only recently come into the prominence it deserves. The appearance of this factual study on this vitally important area should be welcomed by professionals and laymen alike–in fact by all those who are interested in, and concerned with, the advancement of American education.

Sincerely,

Secretary

(signed June 25, 1973)

Publisher's Preface

At the time of her death in October of 1974, Imogene Okes was actively pursuing the possibility of publishing her comprehensive study of adult education in the public school systems. Just a month earlier, in September, 1974, the U.S. Office of Education had published a condensed version of her study, which had been sponsored by the Office of Education's National Center for Education Statistics (NCES). (That publication, entitled *Adult Education in Public School Systems, 1968-69 and 1969-70*, is available from the U.S. Government Printing Office, OE 74-165, Stock No. 1780-01323, 106 pp. It is now in its second printing.)

The condensed version of the report contains the basic statistics gathered by the survey but several other major sections of the report as originally written were omitted (with length a consideration). This was a disappointment to Ms. Okes as she felt that the sections omitted–particularly those which provided a richer description of previous surveys done in the area of adult education, which presented analyses and comparisions with other statistics, and which described in detail the methodology used by NCES in doing this survey–were an integral part of the report and that their presence increased the value of the survey findings for adult educators and other interested readers.

One of her first concerns was that her survey be thorough and well-designed enough to be repeated and the results used in later years. Her intent was to help improve the quality of statistics gathered on adult education in this country. The omission of her detailed sections on methodology and analysis from the published report therefore struck at the heart of her intent. Elsewhere in her professional correspondence she noted that "one of the frustrations in trying to compare and profit from previous surveys was the lack of detail available of how they were conducted." She continued, "The methodology used in our survey should be presented in enough detail to make it possible for others to be able to repeat the survey."

In her will, Ms. Okes requested me to complete arrangements for publishing her full report. This I have done. The version that is published here has profitted from the technical and editorial reviews of the already published abbreviated OE report but it is substantially different in the length and depth as well as scope of the contents. In addition, this version has benefited from the efforts of an editor, Louise W. Knight.

Appreciation is also extended to David R. Summerlin for successfully coping with the challenges of composition.

With the release for private publication of Ms. Okes' original 1972 manuscript under the Freedom of Information Act of 1974, this publication cannot be construed as necessarily representing the position or policies of the U.S. Department of Health, Education, and Welfare.

Imogene Okes, although personally finding the way increasingly difficult, made a determined effort to meet the responsibilities she felt towards professionals in the field of adult education, particularly those who had cooperated to produce the survey and who had invested something of themselves in it. Ms. Okes put much effort into writing a report that would be as useful as possible. If the reader at least finds her approach provocative, I am sure she would have concluded that her efforts had been worthwhile.

F. Loyal Greer
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Washington, D.C. 20009

Author's Preface

This is the first survey of adult education in the public education system to be conducted by the U.S. Office of Education since 1958. The findings show that adult education is growing faster than any other level of education and that there are more students in public adult education (which has been defined here to include elementary and secondary schools and public community and junior colleges) than in higher education.

Despite the fact that the data presented in these pages are not recent—they cover the years 1968-70—they are the most comprehensive statistics of adult education in the public education system available as of today. [*Publisher's Note:* This remains true as of August 1976.] This study is also important because it is one of the few national surveys on adult education containing information from all of the states and drawing on no other data to supplement the data gathered. All of the data reported on here were provided by the states for this survey.

This survey came into existence because of the cooperative efforts of many people, both inside and outside the government. It was begun in 1968 by Morris B. Ullman, while he was serving as chief of the Adult and Vocational Education Surveys Branch (AVSB) of the National Center for Education Statistics (NCES)—which at that time was part of the Office of Education but which has since been moved to the Office of the Assistant Secretary of Education, Department of Health, Education and Welfare; soon after it was begun the author of this report was given responsibility for the survey and Dr. Robert Calvert, Jr. became chief of the Branch.

The request for the survey came from outside the government, from Robert Luke who at the time was the executive director of the National Association for Public School Adult Education (NAPSAE). The NAPSAE has since changed its name to the National Association for Public Continuing and Adult Education (NAPCAE); Robert Luke is now with the National Education Association.

After the Office of Education agreed to conduct the survey, the NAPSAE named James R. Dorland, who was then the executive director of the National Council of State Directors of Adult Education (an affiliate of NAPSAE), to serve as a liaison between the Office of Education and NAPSAE. In addition, a task force made up of members from the affiliate group was appointed to provide advice and assistance throughout the project. Members of the task force were James H. Fling (who served as chairman), John P. Moran of Maine and Richard R. Gartner of Texas.

While NCES has never before produced an institutional survey of public adult education as thorough or comprehensive as this one, it has conducted other surveys in the area; some, like this one, based on data collected from institutions, and others based on data gathered from the adult students themselves. These last are known as participation surveys. Institutional surveys conducted by NCES in the past have covered adult education as it is practiced in colleges and universities and community organizations.

The Adult and Vocational Education Surveys Branch's (NCES) first major participation survey in adult education was conducted in 1969. The survey was designed by AVSB but the data were actually collected for NCES by the Bureau of the Census. [*Publisher's Note:* This same survey was also conducted in 1972 and 1975. The report of the 1969 survey has been printed for the second time by the U.S. Government Printing Office. (See p. 150 for reference.)]

The author gratefully acknowledges the contributions of Dr. F. Loyal Greer, who, serving as consulting social psychologist for the survey, established standards of technical quality for the report and designed the analytical presentation.

In AVSB, Nicholas Osso helped contact the states regarding the assignment of coordinators and the initial submission of returns. Mrs. Geneva Davis and Juanita Chase served in innumerable ways. Summer interns, James Hassmer, Robert G. Fellows, and Ronald Benenson, assisted in processing the data.

The author is also grateful to the many adult educators and other public school officials across the country who gave unstintingly of themselves to insure the success of the survey.

Imogene E. Okes
July 25, 1972

[*Publisher's Note:* This preface is essentially the one that was written by Ms. Okes for this complete edition of her report. We have, however, taken comments she made in her correspondence and in other places—comments which we felt deserved a place in her prefatory remarks—and incorporated them here.]

Abstract

In 1970 and 1971 the U.S. Office of Education conducted an important survey on public adult education. The findings of that survey on the school years of 1968-69 and 1969-70 are summarized here. It was important because it was the first survey since 1958 that the Office of Education (OE) had conducted that concentrated on adult education in the public elementary and secondary schools and in the two-year public postsecondary schools.

As a preliminary effort to the survey, the Office of Education's National Center for Education Statistics, which also conducted the survey, did a careful analysis of the findings of other researchers on the subject of public adult education. As a result this survey has been able to build on earlier insights and to make comparisons with earlier data as well as to avoid pits that others have inadvertently fallen into.

This survey was designed to be comprehensive and to produce data that were comparable. It was further hoped that it would deepen our understanding of the kinds of adult education offered in the United States through the public education system.

Encouraged by the National Council of State Directors of Adult Education, public officials in every state and outlying area provided data on adult education in their respective areas. Initial inquiries had revealed that some states planned to include data collected not only from elementary and secondary schools but also from public community and public junior colleges, and that many states served all of these institutions through their adult education division. It was therefore decided to request data both from state education agencies and, where they existed, offices for the public two-year colleges.

Earlier state-by-state non-sampling ("universe") studies of adult education enrollments in the public schools have yielded statistics which, the investigators readily admitted, had gaps. Nevertheless, the need for such data for descriptive, comparative, projective, administrative and legislative purposes, steadily increases.

Because of the methodolgy used in the present universe study, it is believed that the findings can be evaluated by comparing them with other data known to be reliable and that the state-by-state rankings, in the respective measures, and the correlation or lack of correlation between them can be used as quality indicators.

For example, close rankings for a state between the number of children in public secondary and elementary schools (which can be assumed to be a fairly accurate figure) and the number of adult education enrollments, can indicate the overall reasonableness of the statistics. A discrepancy of a marked degree for any one state for its rankings can suggest that there was over- or under-reporting of the data as well as give some idea of the extent of that difference.

All the critical information is presented in the order the data were elicited on the survey form (see appendix). The discussion moves from identification of adult education in each state or other area, to enrollments, instructional staff, and purposes of programs such as adult basic education and occupational training. Separate data are presented for the following categories: federal, state and local levels of sponsorship, 27 federally-funded programs, four Office of Education programs, public community and junior college programs and cooperatively-offered programs.

Enrollment and staff figures are shown in the following ways: for full-time, for part-time, for part-time as percent of total, and for ratio of enrollments to instructors. For each breakdown the change is noted between 1968-69 and 1969-70. Statistics are given for each state, for outlying areas, for the average state (where each state figure has equal weight), and for national summations.

Adult education statistics are displayed state by state in conventional tabular presentations. To enhance the meaning and interpretations of the survey findings, some tables are augmented with other educational and census data such as average annual salary for elementary/secondary teachers, higher education enrollments, median school years completed by persons age 25 and over, and residential populations for the states. Then, to permit comparisons of the data between states, the statistics for each state were transformed into a percentage of the total for all states, and these state percentages were ranked from 1 to 51.

Some selected findings follow.

- Some 8.3 million adult education students were served by 230,000 instructors in fiscal year 1969. The comparable figures in 1970 were 9.2 million students and 250,000 instructors.
- Whereas the increase in Adult Vocational Education enrollment between the two years was 6.8 percent, the

increase was 12.5 percent in all other (i.e., non-vocational) enrollment. Yet the vocational instructional staff increased 10.7 percent, as against 8.6 percent for other staff.

- More than a quarter (26.2 percent) of the 839 adult education programs in the public education school system in 1968-69 were offered in cooperation with a non-school government agency, a community organization, or an educational enterprise.
- Community college adult education enrollment in 1968-69 was conservatively estimated as 1,276,000, or 15.3 percent of the total adult education in the public education system.
- Raters judged "occupational training" to be approximately twice as important as any one of the other four descriptive purposes for programs.
- The *local* level of governmental sponsorship showed the greatest proportional gain in enrollment for adult education. Percentage increases from 1968-69 to 1969-70 were: federal sponsorship, 6.0; state, 9.7; and local, 23.3.
- A state-by-state examination of adult education enrollments revealed a high relationship of rankings with state populations and higher education enrollments.
- A positive relationship existed for rankings between adult education enrollment as percent of state populations and average size of school districts in the states.
- The 17 states with the largest populations showed the largest proportions of people in the states enrolled in adult education compared with the two equally sized smaller groupings of states: 17 largest states, 4.36; 17 medium states, 3.86; and 17 smallest states, 3.12.

Using summaries of past surveys, the base-line data provided here, and the methodologies previously developed, others will continue to do vigorous work in this field. It is hoped that fuller cooperation from adult educators and other administrators may be stimulated by this demonstration of what can be done with the statistics they provide. Given adult education's present state of flux and adjustment, professional adult educators stand only to benefit from better surveys. Using the knowledge they gain, they can introduce new policies to help adult education in the public school system develop as it should–in response to the needs of society.

List of Abbreviations

AAJC	American Association of Junior Colleges
ABE	Adult Basic Education (a federal program; when not capitalized, a type of adult education program)
AEA	Adult Education Association of the United States of America
Ag	Department of Agriculture
AGE	Adult general education (excludes adult vocational education)
AOA	Administration on Aging
AVE	Adult Vocational Education (a federal program; when not capitalized, a type of adult education program)
Bur. Prisons	Bureau of Prisons
BIA	Bureau of Indian Affairs
CC	Public community and junior colleges
CDAE	Civil Defense Adult Education (a federal program)
CEDS	Committee on Educational Data Systems
CO-OP	Cooperatively-offered program with another agency
CPS	Current Population Surveys
Defense	Department of Defense
(D)HEW	Department of Health, Education and Welfare
ESEB	Elementary-Secondary Education Branch (NCES)
FSA	Federal Security Agency
GED	General Education Development examinations
JOBS	Job Opportunity in the Business Sector
MDT	Manpower Development and Training
NAPCAE	National Association of Public Continuing and Adult Education
NAPSAE	National Association for Public School Adult Education
NCES	National Center for Education Statistics (DHEW)
NEA	National Education Association
OEO	Office of Economic Opportunity
PHS	Public Health Service
RSA	Rehabilitation Services Administration (formerly Vocational Rehabilitation)
SEA	State Education Agency
SRS	Social and Rehabilitation Service
(US)OE	United States Office of Education
VISTA	Volunteers in Service to America (a federal program, part of Action)
Voc. Rehab.	Vocational Rehabilitation (now–Rehabilitation Services Administration)
WIN	Work Incentive Program

1
Introduction

The U.S. Office of Education's National Center of Education Statistics (NCES) conducted a survey covering the school years 1968-69 and 1969-70 to discover the extent of adult education in the public school systems across the country. For the purposes of the survey, public education was defined to include elementary and secondary education agencies and public junior and community colleges. This publication is a summary of the results of that survey.

The report has three parts: one deals with the past, one with the present and one with the future. The present naturally occupies the most space as it includes a description of how the survey was developed. Supplementary data at the end of the report include an appendix, consisting of the survey instrument (questionnaire) and the forms used in correspondence by NCES, a glossary, the bibliography and an index.

As the first part of the report, Chapter 2 summarizes the findings of past surveys in adult education, which were reviewed by the staff of NCES in preparation for designing this present survey. These historical materials are not general in nature but selected to be pertinent to the data collected in the survey. They provide a context and can serve as a guide to understanding the current statistics, particularly in helping to detect trends.

Chapter 3 presents a thorough description of how this survey was designed and administered and how the material was analyzed. To summarize briefly those procedures here, the department of education in each state and outlying area (a term often used by the federal government to designate the U.S. territories and Puerto Rico) was asked to provide the U.S. Office of Education (USOE) with statistics on the number of full-time and part-time students and instructors involved in adult education programs sponsored by federal, state or local government agencies and administered by public elementary and secondary schools, public community colleges and public junior colleges within that state or outlying area.

In Chapter 4 we present the data and draw some tentative conclusions or, where appropriate, some hypotheses. Rank-difference correlations, which are derived from the data, are presented in text tables and their meanings discussed.

Chapter 5 consists of a summary of Chapters 2, 3, and 4. For readers short of time this is the chapter to read.

Chapter 6 contains our conclusions on the state of public adult education and our thoughts on developments for the future.

Perhaps a word should be said here on the use of rankings and of rank-difference correlations in this survey. Earlier state-by-state universe studies of adult education enrollments in the public school systems produced statistics which, even the researchers readily admitted, had certain gaps. This condition has continued even as the need for accurate and complete data has been increasing.

Both the professional statistician and the layman tend to accept the presence of errors in sample surveys as unavoidable but be skeptical of the possibility that there might be unavoidable errors in a universe study. Nevertheless, universe studies can possess such errors and still be of considerable value.

Indeed, an attractive feature of the universe survey which the sample survey does not possess is that in the universe survey it may be possible to identify the more probable direction of the error. If a particular sample on which a sample survey is based misrepresents the true situation, the statistician cannot know whether that sample under-represents or over-represents reality. But in a universe sample it may be possible through rankings and the use of external data to know this.

In the present universe study the final data have been evaluated by being compared with data known to be reliable which were drawn from other surveys. The comparisons have been made after the data have been ranked.

Discrepancies in rankings for two variables for the same state can serve, as in this case, as indicators of quality. Although caution must be used, the process is an important aid in interpreting data. Use of rankings and rank-difference correlation hopefully permit the reader who knows statistics to skim over the text while offering the interested adult educator who may work with statistics infrequently a way to learn simple statistical techniques and see them applied directly to an area of particular interest to him. Most importantly, perhaps, the techniques allow a state to compare itself easily with other states and will make it easy for a state to compare its growth in aspects of adult education with the growth of other states. The rank-

difference correlation is useful here as an index. Once the rank-difference correlation has been computed for two variables, a state has a "standard" against which to judge its own rank-difference on the same two variables. The rank-difference correlation tells the state whether a large or small discrepancy is common for states.

Finally, a word should be said about the accuracy of the statistics reported here. On the one hand, the data on enrollment and staff, except that from several identifiable states, have been demonstrated to be consistent with other educational data gathered in other surveys. On the other hand, there is reason to believe that, for many states, the data on program purposes (the states were asked to assign a program purpose–five possible ones were supplied–to each of the federal, state and local programs they described in the survey) are less reliable and valid. There is little sound data which the data on purposes from this survey can be checked against; this is especially true for the data on state and local programs. Furthermore many states failed to assign program purposes to some of their programs. Because of the size of the sample, the national data on program purposes is more accurate.

Experience has taught us that the more education people have the more likely they are to seek additional education. Certainly it is true that the proportion of people in the population who have taken courses in college is rising. This is partially because young people are staying in school longer than they used to and partially because the proportion of young adults to other age groups in the population has been increasing. All of this suggests that in the future there will be an increasing demand for adult education in this country.

Will public education be ready to meet the demand? Will its hiring of teachers keep pace with the increased number of students? Will it provide more full-time staff?

These are important questions. But perhaps before we dream too far into tomorrow seeking answers to them, we should give some thought to the past and to the present. The results of this survey can tell us something about our current situation–what the ratio is of students to instructors, how fast enrollment is increasing, and in what areas. And previous surveys can offer insight into the effect of educational attainment and size of school district on enrollment in adult education.

Believing this, the designers of this survey decided to undertake a review of all previous statistical studies done of adult education in the American public education system, with the hope that this stocktaking would reveal the pitfalls discovered by predecessors and allow the present survey to benefit from their best insights and techniques. This review is summarized in Chapter 2.

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Previous Studies

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Tables: All tables contained in this chapter are listed on page iv in the Table of Contents.

2
Previous Studies

Until recently, the people who gather statistics in this country have given little attention to adult education. Although the U.S. Office of Education (USOE) and its predecessors have, as part of their biennial survey of state school systems, conducted surveys of public school adult education since 1925, not a single one of these recent studies has been based on information from all 50 states. Nor have these studies employed the same definition of who should be counted as an adult education enrollment. It was not until 1947 that the Office of Education did a survey that was devoted solely to collecting statistics on adult education in the public school systems.

Despite these limitations, earlier studies have made important contributions to our knowledge of adult education in the United States. Keeping their results in mind, we can appreciate the significance of current statistics. Familiarization with how the earlier surveys were designed also gives us a better understanding about the "state of the art" of surveying public school adult education, as well as puts us in a better position to improve upon prior models.

U.S. OFFICE OF EDUCATION SURVEYS

Adult education surveys by the U.S. Office of Education have been conducted sporadically. Three preceded the present one. The first, for 1947 by Homer Kempfer (reference 19), was a state-by-state survey of school districts in communities with certain size populations. The second, for 1956 by John B. Holden (reference 14), was a survey of state departments of education supplemented with data from the vocational education digests. The last, for 1958 by Marthine Woodward (reference 49), was not done by state but was a national survey of school districts with elementary-secondary enrollments of a certain size.

[*Publisher's Note:* The Biennial Survey continues to be conducted by the Office of Education but the section dealing with adult education was discontinued after 1968 on the assumption that such statistics would be collected in surveys like this one in the future. Individuals wishing to consult the adult education data from the surveys for the years 1925 through 1946 will find it most accessible in Kempfer's 1949 study (reference 19).]

Two earlier adult education reports, by Alderman for 1924 (reference 2) and Gaumnitz and Stanton for 1940 (reference 9), were descriptive rather than statistical. Text table A gives a chronological list of the major public school adult education statistical surveys with the different bases for their data and with their findings on enrollments related to the national resident population.

Table A. U.S. public school adult education surveys: 1947-48 through 1969-70

Reference	Statistical year	Data base	Public school adult education enrollment (National estimates)	U.S. population[1]	Proportion of population enrolled in public school adult education (%)
1	2	3	4	5	6
Kempfer, 1949 Office of Education (OE) Federal Security Agency (FSA) (19)	1947-48	Information on school districts with populations of 2,500 and over drawn from 1940 census; some states with school districts of small populations did only limited surveys. Many districts with known adult education activities failed to provide data. Adult vocational education (AVE) included; public junior college (CC) adult education included; cooperative (co-op) involvement excluded; duplication (dupl.) not mentioned. 48 States and D.C.	2,128,887	144,083,000	1.48

See footnotes at end of table.

Table A. U.S. public school adult education surveys: 1947-48 through 1969-70—Continued

Reference	Statistical year	Data base	Public school adult education enrollment (National estimates)	U.S. population[1]	Proportion of population enrolled in public school adult education (%)
1	2	3	4	5	6
Kempfer, 1949—Continued		Annual reports, voc. ed. stat. and special state reports suggest approx. 820,000 more students were involved in adult education programs whose participation was not covered in the survey.	820,000 3,000,000	144,083,000	2.08
National Education Association (NEA), 1952 (23)	1950-51	Used stratified random sample, designed by Census Bureau, of school districts with 150 or more children enrolled. AVE included; no mention CC, co-op, or dupl. Information not presented state by state.	4,744,256	151,868,000	3.12
Olds, 1954 Adult Education Association (AEA) (27 & 28)	1952-53	Used stratified sampling of different sized cities, extrapolations, and estimates. AVE and CC included; co-op excluded; dupl. not mentioned. 30 states and D.C.	*2,936,000	156,393,000	1.88
Holden, 1959 U.S. Office of Education (OE) (14)	1956-57	Sum of adult general education (AGE) and AVE statistics obtained through survey of State departments of education supplemented by figures from "Statistics of State School Systems" in the Biennial Survey of Education and Digest of Annual State Vocational Education Reports. CC excluded; no mention co-op or dupl. 48 States and D.C.	AGE 2,562,316 AVE 1,810,738 4,373,054	168,088,000	2.60
Woodward, 1961, OE (49)	1958-59	School districts with 12,000 and more elementary/secondary pupils; sampling and projections for those between 150 and 11,999 pupils. Counts for "classes, correspondence courses, individual activities." AVE included; CC excluded; "cosponsorship" included. Unduplicated count. Not state by state.	2,896,000	174,149,000	1.66
		Duplicated count in adult classes.	3,428,000	174,149,000	1.97
Johnstone and Rivera, 1965 National Opinion Research Center (18)	1962	Interviews with 2,845 persons in national sample. Unduplicated attendance in adult education classes in elementary and high schools. AVE included; no mention CC, co-op. Not state by state.	1,740,000	185,890,000	0.94
		Duplicated count.	1,920,000	185,890,000	1.03
National Association of Public School Adult Education, 1968 (20)	1965-66	Elementary and secondary level adult programs. No mention AVE, CC, co-op, dupl. 44 states.	*1,665,573	193,815,000	0.86
Holden, 1969 Council of Chief School Officers and NEA (15)	1966-67	Sum of AGE and AVE statistics obtained through survey of state departments of education supplemented by figures from Adult Basic Education (ABE) and AVE reports. CC excluded; no mention co-op or dupl. 50 states and D.C.	AGE 3,534,930 AVE 3,065,170 6,600,100	195,923,000	3.37

See footnotes at end of table.

Table A. U.S. public school adult education surveys: 1947-48 through 1969-70—Continued

Reference	Statistical year	Data base	Public school adult education enrollment (National estimates)	U.S. population[1]	Proportion of population enrolled in public school adult education (%)
1	2	3	4	5	6
National Association of Public Continuing and Adult Education (NAPCAE), 1970 (21)	1968-69	State directors of adult education supplied data for "ABE, high school, Americanization, business, and general adult education." No mention AVE, CC, co-op, dupl. 50 states and D.C.	4,276,576	199,870,000	2.14
NEA, 1968 (24)	1968-69	714 school systems with enrollments of 6,000 or more; no mention AVE, CC, co-op or dupl. 50 states and D.C.	1,305,681	199,870,000	0.65
NEA, 1970 (25)	1969-70	702 school systems. Same as above. 50 states and D.C.	1,302,562	201,921,000	0.65
NAPCAE, 1971 (22)	1969-70	State directors of adult education supplied data for "ABE, high school, Americanization, business, and general adult education." No mention AVE, CC, co-op, dupl. 50 states and D.C.	4,979,313	201,921,000	2.47

[1] Total U.S. residental population figures from U.S. Bureau of the Census *Statistical Abstract of the United States:* 1970, page 5 (reference 35).
*Not all states included. See column 3 for number of states reporting.

The Office of Education's *Biennial Survey of Education*, with its chapter or separate report on "Statistics of State School Systems" (references 4, 12, 13, 17, 19, 30, 46 and 48), has been a steady source of data pertaining to adult education but the quality of the data has been very uneven. When the first edition of the Biennial Survey was published in 1918, it did not have any data which could be interpreted as relating to adult education. Neither did the next two. Finally, in 1925-26, the survey contained statistics on the "public night school." During the next four years, various definitions for adult education were used and the number of states included fluctuated. Only for the 20-year period from 1929 to 1949 did all states provide some kind of public school adult education statistics. Since 1950, the number of cooperating states has ranged from 33 to 38.

The states, however, have not been the only source for statistics. Frequently, missing and inadequate adult education data were supplemented by adult vocational education statistics from the OE's annual *Digest of Annual State Vocational Education Reports.*

Text table B provides a chronological listing of the Biennial Survey's adult education statistics and places them in relation to the national population of the time.

Table B. U.S. public school adult education enrollment: 1918-19 through 1967-68

Reference	Statistical year	Coverage[1]	Public school adult education enrollment[2]	U.S. population[3]	Proportion[3] of population enrolled in public school adult education %
1	2	3	4	5	6
Bureau of Education, Dept. of Interior	1918-19 1920-22 1923-24	First three biennial surveys	No statistics pertaining to adult education		
Kempfer, 1949 OE, FSA (19)	1925-26	1925-28 data are for "public night schools"	*825,651	115,832,000	0.71
	1927-28	30 States and D.C.	*993,985	119,038,000	0.84

Table B. U.S. public school adult education enrollment: 1918-19 through 1967-68—Continued

Reference	Statistical year	Coverage[1]	Public school adult education enrollment[2]	U.S. population[3]	Proportion[2] of population enrolled in public school adult education %
1	2	3	4	5	6
Kempfer, 1949—Continued	1929-30	48 States and D.C.	1,245,124	121,770,000	1.02
	1931-32	1931-36 data reflect sum for "night school"	1,320,679	124,040,000	1.07
	1933-34	and "part-time and continuation schools"	1,205,719	125,579,000	0.96
	1935-36	48 States and D.C.	1,408,044	127,250,000	1.11
	1937-38	"Adult schools" mentioned for first time; data are labelled "evening (public night) and adult schools;" data also for "part-time (PT) and continuation schools" 48 States and D.C.	1,378,653 PT 424,421 1,803,074	128,825,000	1.40
	1939-40	1939-40 data are for "part-time, continu-	2,049,839	130,880,000	1.57
	1941-42	ation, Americanization, evening and adult	2,452,995	133,669,000	1.84
	1943-44	schools;" 48 States and D.C.	1,659,681	135,107,000	1.23
	1945-46	"Adult education classes" separately reported for first time; 48 States & D.C.	1,689,497	133,434,000	1.27
Woodward, 1960, USOE (48)	1947-48	48 States and D.C.	1,990,005	144,083,000	1.38
	1949-50	48 States and D.C.	2,572,515	149,304,000	1.72
	1951-52	1951-56 data expanded by Woodward to cover all 48 States and D.C.	2,564,870	153,982,000	1.67
	1953-54		2,722,462	158,956,000	1.71
	1955-56		3,171,760	165,069,000	1.92
Schloss and Hobson, 1961 USOE (30)	1957-58	Excludes figures on vocational rehabilitation (Voc. Rehab.) and community college (CC) courses. 33 States and D.C.	*2,420,531	171,187,000	1.41
Hobson and Schloss, 1963, USOE (12)	1959-60	Includes adult vocational education (AVE) for some states; excludes Voc. Rehab. and CC courses. 38 states and D.C.	*2,282,563	177,135,000	1.28
Hobson and Schloss, 1964, USOE (13)	1961-62	Some state data duplicated; includes some state data for a different year; includes AVE for some states; excludes Voc. Rehab. and CC courses. 37 States and D.C.	*2,493,846	183,057,000	1.36

See footnotes at end of table.

Table B. U.S. public school adult education enrollment: 1918-19 through 1967-68—Continued

Reference	Statistical year	Coverage[1]	Public school adult education enrollment[2]	U.S. population[3]	Proportion[2] of population enrolled in public school adult education %
1	2	3	4	5	6
Elementary-Secondary Education Branch (ESEB) 1967, USOE (46)	1963-64	Same coverage as above for Hobson and Schloss. 33 States and D.C.	*2,109,952	188,658,000	1.12
Hutchins and Barr, 1968, USOE (17)	1965-66	Same coverage as above for Hobson and Schloss. 36 States and D.C.	*2,657,798	193,815,000	1.37
Barr and Scott, 1971 USOE (4)	1967-68	Same coverage as above for Hobson and Schloss. 33 States and D.C.	*3,662,390	197,864,000	1.85

[1] The number of reporting states varies due to the shifting of administrative responsibility for adult education in and out of the state departments of education as well as to the nonresponse on the part of a few states.

[2] Figures in column 4 are considered to be national totals even though data from a few states are missing. Therefore, it seemed legitimate to use the U.S. residential population figures in column 5 in order to arrive at the proportion of people across the country who enroll in adult education in the public education system (column 6). Some may wish to make adjustments for nonreporting states.

[3] Total residential population figures are from U.S. Bureau of the Census *Statistical Abstracts of the United States, 1970,* page 5 (reference 35).

*Not all states included. See column 3 for number of states reporting.

SOURCE: The Office of Education's Biennial Survey of Education.

OTHER SURVEYS

From time to time, professional associations have collected public school adult education statistics. A list would include: The National Education Association (for the years 1950-1951, 1968-69 and 1969-70; references 23, 24 and 25); the Adult Education Association (for the year, 1952-53; reference 28); and the National Association for Public Continuing and Adult Education, as well as its predecessor, the National Association for Public School Adult Education (for the years 1965-66 to the present; references 20, 21 and 22). The American Association for Junior Colleges included statistics on the number of adult students in the country in its annual directories for 1947-48 through 1958 (references 5 and 7).

One-time reports with public school adult education statistics have been prepared by the National Opinion Research Council for 1962 (reference 18) and the Council of Chief State School Officers for 1966-67 (reference 15).

The figures from these reports are included in text table A.

MAKING COMPARISONS

Bases Differ

It is clear from how they evolved that differences rather than similarities have characterized past surveys on adult education. Some studies excluded adult vocational education; others chose not to tabulate information on public community or junior college adult education; almost all of the surveys asked no questions about how the adult education programs cooperated with various public and private agencies and organizations. Because the surveys used such widely different bases for their data, comparisons ought to be made only with grave reservations.

To complicate matters further, there are other differences as well. First, some surveys were based on information supplied by the state departments of education while others came from direct sampling. Second, some surveys "borrowed" data from other research to achieve the final estimates. Third, most of the studies did not distinguish part-time from full-time students. Finally, in some surveys, the enrollment figures were based on "cumulative registra-

tion," that is, on figures which reflected the enrollment of one teaching period added to another. Thus, if a student took a course two sessions in a row, he would be counted twice. All of these problems are clearly evident in the data in text tables A and B.

National Totals Mask State Differences

Even when two surveys have similar totals and appear comparable, an analysis of the detailed parts of each can reveal that the two surveys are not alike. A comparison was made between Homer Kempfer's *Adult Education Activities in the Public Schools* (reference 19) which was completed in 1947 and the 1947 edition of the Biennial Survey (reference 48). Kempfer's survey showed that 2,128,877 persons were enrolled in adult education and the biennial gives the figure, 1,990,005.

The biennial's figure is short of Kempfer's by only 6.5 percent. However, this similarity between national totals of the two studies is misleading. Perusal of the numbers state by state reveals wide differences. Such an analysis was done using the Kempfer data for the 48 states and D.C. as a base. Ignoring the direction of the differences, forgetting about pluses and minuses, and focusing instead on the magnitude of the differences between states, a percentage difference for each state was obtained. These figures were then added and divided by 49 to yield an absolute percentage difference for the average state of 129.6.

Significantly, however, all but two states, Florida and Maryland, had an absolute percentage difference of less than 6.5. Somehow the discrepancies for each state were patterned so as to largely cancel themselves out, resulting in the reasonably similar national estimate.

For a possibly more reliable figure, a new national enrollment total was derived by using the higher of the two enrollment figures given for each state by the two surveys and adding these together. The resulting total of 2,764,403 students was 30 percent more than the original Kempfer total of 2.1 million (the new estimate represents 1.91 percent of the U.S. population for 1947). To his credit, Kempfer did suggest in the report on his survey that the true figure for adult enrollment in the public schools for 1947-48 was probably closer to three million. Both Kempfer's survey and the Biennial Survey findings seem to have been conservative approximations.

Cooperation of Respondents Varies

The previous discussion indicates that much of the early data on adult education has limited value because it was dervived from surveys that, because of their designs, cannot be considered strictly comparable. The analyst must also live with problems of collection.

Sources for data on adult education have not always provided complete information. Kempfer (reference 19) reported that of the 4,815 school districts which received questionnaires only 68.8 percent sent in their replies. And 18.2 percent of those who responded failed to give enrollment figures. Holden (reference 14) admitted that he had to supplement data obtained from state departments of education with figures from the Biennial Survey and the *Digest of Annual State Vocational Education Reports.* In updating his report in 1969 (reference 15), he added data from the Office of Education's Adult Basic Education (ABE) reports and vocational education reports to the data provided by the states.

The failure of some states to respond has continued to be a problem. Since 1957-58, the number of states providing adult education figures for the Biennial Survey has varied from 33 to 38. To date, no survey in this series has been based on complete data from all states and the District of Columbia.

Surveys by private organizations have not fared much better. The urban study by the National Education Association (NEA) in 1952 (reference 23) drew a 72.1 percent response from the 1,232 school systems which were sent questionnaires. NEA conducted two other surveys (references 24 and 25) and received even less cooperation. In both cases, the survey was attached to a schedule for another purpose and was mailed to school systems with enrollments of 6,000 or more. In 1968 only 58.4 percent reported adult education data and in 1970, 61.5 percent.

A FEW TRENDS

Enrollment

Despite these inaccuracies, it is possible to discern general changes and trends in adult education enrollments in the public education school system. From the late twenties to the late sixties, the number of people participating in adult education throughout the public education system increased about five-fold while the population in the United States had yet to double. Nevertheless, the proportion of the population involved in public school adult education within recent years is hardly more than two or three times what it was reported to be in the late twenties.

It is interesting to note that, although an overall trend of growth is unmistakable, there is considerable variety between different studies in estimates for the years 1925

to 1950 and beyond. Even so, numbers from the Biennial Survey for those years (reference 19) indicate a fairly consistent increase in adult education enrollments over that period with an understandable dip at the end of World War II (see text table B).

The most recent adult education figures available from the Biennial Survey are for the 1960's (references 4, 12, 13, 17, 30, and 46). They show that there was a sudden decline in the rate of growth during that decade. This may have been due to the fact that those who gathered the statistics no longer included data from the Office of Education's vocational and technical education annual reports (references 38 through 42, 44, and 45) in the Biennial Survey data. Whatever the reason, the circumstance makes it all the more important that consistently complete and accurate public adult education statistics be gathered from this point forward.

Adult Vocational Education

A minor part of the growth in adult education can be attributed to growth in vocational education. Using various combinations of statistics from the Biennial Survey and from his own questionnaire, Holden (reference 14) compared changes in enrollment for the 48 states and the District of Columbia for the years 1946-47 and 1956-57 and found an increase of 63 percent, which be broke down to 34.9 percent increase in adult vocational education and a 91.1 percent increase in adult general education.

More recently, in his 1969 chapter on "Adult Education in the Public Schools" (reference 15), Holden shows that while the initial spurt of adult general education over adult vocational education enrollment in the years from 1946 to 1957 has not been maintained, adult general education between the years 1946-47 and 1966-67 continued to grow more rapidly overall than did public adult vocational education during those same years.

Table C. Enrollment in public adult general education and public adult vocational education: 1946-47 through 1966-67

Date	Adult general education			Adult vocational education		
	Enrollment	Percent increase over 1946-47	Percent increase over 1956-57	Enrollment	Percent increase over 1946-47	Percent increase over 1956-57
1966-57	3,534,930	163.7	38.0	3,065,170	128.4	69.3
1966-67	2,562,316	91.1		1,810,738	34.9	
1946-47	1,340,637			1,342,149		

Based on Holden, 1969 (reference 15)

As is often the case, these broad statistics camouflage the shorter trends. A recent vocational education report (reference 43) reveals there was a drop in the enrollment in adult vocational education in 1969-70 at the rate of −12.6 percent from the preceding year. This may be explained by lateness in federal and state funding, by a new emphasis on career education for in-school students at the expense of adult programs, or by the new use of more efficient processing techniques which makes it possible to avoid counting twice a person who takes more than one course.

The relatively steady growth in enrollments in Adult Vocational Education in the public education school system can hardly be challenged. Text table D indicates that the average yearly increase from 1963 to 1969 is 6.3 percent with a total rise for this period of 43.7 percent. Indeed, the *Vocational & Technical Education Annual Report for Fiscal Year 1967* (reference 40) projected an Adult Vocational Education figure of 4,189,500 for 1970 and 6,500,000 for 1975. The 1970 projection represents a 97.3 percent increase over the 1963 figure and the 1975 projection represents an increase of 206.2 percent over the 1963 figure.

Table D. Enrollment in Adult Vocational Education: 1962-63 Through 1969-70

Year	Enrollment in public school Adult Vocational Education
1962-63	2,123,122
1963-64	2,254,799
1964-65	2,378,522
1965-66	2,530,712
1966-67	2,941,109
1967-68	2,987,070
1968-69	3,050,466
1969-70	2,666,083

Adult Vocational Education (AVE) statistics were not separated out from the general adult education statistics until 1963, when the Vocational Education Act, which required the independent reporting of vocational education statistics, was passed. After 1963, figures include Guam, Puerto Rico, and Virgin Islands. Data in this table were taken from reports on vocational education (references 38-42, 44, 45).

Nevertheless, some reservations should be registered. Adult vocational education may be experiencing a real decline in popularity in the public school system. The drop in 1969-70 adult vocational education statistics on adult education enrollments may not have been a fluke. Previous figures may have been inflated. Over a 20 year period Holden found that there was a faster rate of growth for adult general education; this also gives one pause. None of this necessarily proves that there has been a diminution in the number of adult education participants in adult vocational education—people may be seeking such training from sponsors (such as employers or technical institutes) other than the public education school system—but it does suggest it. The current survey sheds some light on the situation by providing additional statistics and evaluations by each state representa-

tive on the importance of adult vocational education in his or her state.

Community College Adult Education

Only meager data are availabe about public community or junior college adult education. Because the Biennial Survey's figures, although collected separately, were reported in combination with other statistics, public community or junior college adult education enrollment cannot be determined from that source.

Private associations have collected more useful data. The Division of Adult Education Service of the National Education Association in its *A Study of Urban Public School Adult Education Programs*, 1952 (reference 23), estimated that in 1951-52, 388,703 people were participating in adult education in public junior colleges. (Over a quarter million of this sum came from the state of California alone.) Five years earlier, the figure was half of that, or less than 200,000. The authors of the report concluded that if the trend evident in 1952 should continue, enrollment in adult education in the public junior colleges should be well over a million by 1960. That projection is now known to have been too high. Figures on enrollment of adult students, which were published in the directories of the American Association of Junior Colleges (AAJC) (references 5 and 7) never met the NEA projections but, even with different states reporting, they increased 2.43 percent during the ensuing five-year period: 257,744 for 35 States in 1951-52 and 264,026 for 37 States in 1955-56. (Here, too, a disproportionate number, 175,039 in 1951-52, came from California.) Unfortunately, the AAJC no longer publishes separate data on adult students.

Instructional Staff

An examination of text table E indicates that over the years, there has been an increase in the number of teachers for adult students. Other research also shows an increase. Data presented in *A Study of Urban Public School Adult Education Programs*, 1952 (reference 23), indicate that between 1946-47 and 1950-51 for the smallest cities sampled (N=155) there was an increase of 110.4 percent in the number of teachers. The increase was 63.8 percent for medium-sized cities (N=139); and only 25.3 percent for the largest cities (N=65). These results are consistent with contemporary enrollment figures which show that adult education was growing faster in the smaller communities than in the larger.

Patterns in the ratio of students to teachers are more difficult to discern. A higher number of students to staff during and immediately after the Second World War is understandable. Figures for more recent years fluctuate around a ratio of 50 students to one teacher, although for any one year actual class sizes may differ widely from the

Table E. Numbers of instructional staff in public school adult education and ratios of students per teacher: 1925-26 through 1969-70

Reference	Statistical Year	Instructional staff[1]	Average number of students per teacher[2]
1	2	3	4
Kempfer, 1949, OE, FSA (19)	1925-26	*21,213	38.9
	1927-28	*22,304	44.6
	1929-30	30,043	41.5
	1931-32	28,432	46.5
	1933-34	22,882	52.7
	1935-36	29,217	48.2
	1937-38	36,548	49.3
	1939-40	42,544	48.3
	1941-42	41,070	59.7
	1943-44	24,096	68.9
	1945-46	21,153	79.9
Woodward, 1960, OE (48)	1947-48	31,356	63.5
	1949-50	46,667	55.1
NEA, 1952 (23)	1950-51	*85,893	42.4
Woodward, 1960, OE (48)	1951-52	52,804	48.6
	1953-54	50,301*	54.1
	1955-56	62,704	50.6
Schloss and Hobson, 1961, OE (30)	1957-58	40,587	59.2
Woodward, 1961, OE (49)	1958-59	80,500	42.6 dupl (students) 36.0 undupl (students)
Hobson and Schloss, 1963, OE (12)	1959-60	*42,396	53.8
Hobson and Schloss, 1964, OE (13)	1961-62	*41,053	60.8
National Center for Education Statistics (NCES), 1967, OE (46)	1963-64	*37,302	56.6
Hutchins and Barr, 1968 (17)	1965-66	*54,077	49.1
Barr and Scott, 1971, OE (4)	1967-68	*38,668	94.7
NAPCAE, 1970 (21)	1968-69	83,175	51.4
NEA, 1968 (24)	1968-69	46,033	28.4
NEA, 1970 (25)	1969-70	46,412	28.1
NAPCAE, 1971 (22)	1969-70	104,856	47.5

[1] No differentiation between full-time and part-time.
[2] See text tables A and B for companion enrollment figures and comments on data bases and definitions.
*Not all states included.

average. Woodward (reference 49) found the average class size for adult education in 1958-59 to be 25; the mean number of classes for teachers was 1.8 with the average ranging from 1.5 for small communities to 2.3 for the larger ones. Also, the mean number of students per teacher varied from 35 for the small cities to 65 for the larger ones. Seemingly, adult education teachers in the larger communities had the heavier work loads.

Differences in instructional responsibilities, with class size as one of the criteria, were reflected in the job designs. There were well over three times as many paid full-time teachers in the larger communities as in the smaller ones. For 1958-59 Woodward uncovered for her total sample 2.2 percent paid full-time teachers, 89.8 percent paid part-time teachers, 3.6 percent regular teachers who taught adult classes without additional compensation, and 4.4 percent volunteer teachers. The NAPCAE *Almanac* for 1970 (reference 21) listed for the 1968-69 school year for 41 States and the District of Columbia 5,781 full-time instructors and 77,394 part-time instructors; 93.0 percent of all instructors were, then, part-time personnel. For 1969-70 for 47 States and the District of Columbia (NAPCAE *Almanac, 1971*, reference 22), the numbers were 9,484 full-time and 95,372 part-time instructors with part-time instructors representing 91.0 percent of the total.

Since neither of these studies defined part-time or full-time instruction in terms of the number of classroom hours taught, it is remarkable that a difference of a few percentage points separates the Woodward figures and those of the NAPCAE. The present survey explicitly defines full-time as 15 or more hours of instruction per week. Also, the survey was designed in a way that allows one to note changes in the ratio of part-time to full-time from one year to the next.

INSIGHTS GAINED FROM PREVIOUS STUDIES

Size of Community as Influence on Adult Education

Several studies have shown that the size of a community, whether it is part of a school district or a city, has impact on the number of students who enroll in adult education courses. These surveys found that larger school districts or larger cities not only have more students enrolled but also that these students represent a larger proportion, or percentage, of the total population than do smaller communities.

The data from previous studies which indicate the trend described above are as follows.

Kempfer (reference 19) was the first to reveal the relationship between the size of the school district and enrollment in adult education (text table F).

Table F. School district size and public adult education: 1947-48

Number of school districts reporting	Size of population	Percent of school districts offering adult education courses
218	50,001 and more	96
783	10,001 - 50,000	86.7
1,207	2,501 - 10,000	74.9

From table 3, p. 8, Kempfer, 1949 (reference 19)

In his 1954 report Olds (reference 27, 28) uncovered the same direct relationship (text table G).

Table G. School district size and public adult education: 1952-53

School district size in estimated population	Percent of school districts offering adult education courses
over 150,000	98
35,000 to 150,000	76
9,000 - 35,000	58
900 - 9,000	29

From chart 1, p. 5, Olds, 1954 (reference 28)

In 1961, Marthine Woodward (reference 49) in her survey confirmed these findings (text table H).

Table H. School district size and public adult education: 1958-59

Enrollment-size by group	Enrollment in school system	Percent of school districts offering adult education courses
Group I	25,000 and over	88.6
Group II	12,000 - 24,999	76.3
Group III	150 - 11,999	31.0

From text, p. 5, Woodward, 1961 (reference 49)

In her summary from data in the Biennial Surveys from 1940-56 regarding adult education, Woodward (reference 48) reported that, for the entire period of her analysis, larger cities were more likely to have adult education than smaller ones. For the 1955-56 biennium, for instance, 78.0 percent

of the largest city systems offered adult education courses compared with 8.0 percent of the smallest cities.

The size of the community also seems to be a factor determining the proportion of adults to children enrolled. NEA's urban adult education study, 1952 (reference 23) revealed that of the sample of 80 large cities, adult enrollment was 20.5 percent of day-school enrollment of children; for the sample of 216 small cities the comparable percentage was 15.3. Woodward, 1961 (reference 49) observed that her data indicated an unduplicated adult enrollment of about 17 adults per 100 elementary and secondary school pupils for Group I (largest) school districts whereas the number was about 12 for every 100 children enrolled in Group II and III (smaller) school districts.

The correlation between the size of a community and the proportion of its members that enroll in adult education courses may help us to make a prediction about the future. It is a well-known fact (see text table I.) that the trend is for small school districts to consolidate into larger ones. (By 1969 only four states had more than 1,000 school districts: California, Illinois, Nebraska, and Texas.) As this happens we may expect to see an increase in the number of participants in adult public education. One explanation for the increase may be that a larger school district can serve and attract larger numbers of adult students because of its more extensive resources–funds, staff, equipment and facilities–and its centralized organization.

This correlation also provides an additional reason for conducting institutional adult education surveys through the states. For obvious reasons, state education agencies tend to have much closer relationships to administrators in their state's largest school districts. Therefore, as the number of large school districts continues to increase, it seems likely that the importance of the state as a jurisdictional unit within adult education will also grow.

Table I. The number of School Districts: 1947-48 through 1969-70

	Number of school districts[1]
1947-48	94,926
1957-58	47,594
1967-68	22,010
1968-69	[2]20,440
1969-70	19,169

[1] Includes operating and nonoperating school districts.
[2] 19,339 operating school districts.

From data in *Digest of Educational Statistics 1970*, pp. 43-44 (reference 31) and *Fall 1968 Statistics of Public Schools*, p. 9 (reference 3).

Greatest Growth in Small Districts

A second insight gained is that the greatest proportional amount of growth in adult education has been occurring in districts with smaller populations. The National Education Association's *A Study of Urban Public School Adult Education Programs* in 1952 (reference 23) classified reports from school systems on the basis of the city size: over 100,000 in population was considered large, between 30,000 and 100,000 was medium, and 2,500 to 30,000, small. Of the 1,232 questionnaires mailed to the various cities, 72.1 percent gave some type of reply. (Responses were received from approximately 84 percent of the large cities, 76 percent of the medium-sized cities, and 69 percent of the small cities. This suggests that the data may be biased.) Respondents were asked to compare their enrollments for the years 1946-47 and 1950-51. Overall, the increase in enrollment for the five year period was 51.2 percent, with the large cities reporting 37.2 percent, medium cities reporting 87.7 percent, and small cities reporting 100.3 percent. The finding that whereas 32.9 percent of the smaller cities had no program in 1946-47, only 2.9 percent of the large cities had no program in 1946-47 suggests that smaller cities can make greater proportional increases more readily than large ones.

SUMMARY

Although past surveys differ from each other in many ways–they have had different sponsors, depended upon different groups for information and not always agreed in their results–there are several things to be learned from them.

Some of the things we can learn from past studies are that enrollment figures are the common gauge used for measuring adult education, that they are generally available with varying degrees of reliability, that instructional staff statistics are provided less often, that adult vocational education figures have been used to supplement adult general education figures and that the growth pattern in these two areas is not the same, that only meager data are available on public community or junior college adult education, that few attempts have been made to keep track of the extent of cooperation between institutions doing adult education, that gross figures mask wide divergencies, that descriptions of kinds of adult education vary, that larger cities and larger school districts have proportionally more people engaging in adult education, and that greatest proportional growth of adult education seems to occur in smaller population units.

CONCLUSION

Lessons from earlier surveys were applied in designing the present survey. Previous efforts had used different data bases, making comparisons difficult. It therefore seemed advisable to the researchers to design a survey which could be repeated time after time, which would establish continuity in surveying, and to incorporate in the new data collection instrument a device for gathering comparable statistics. Because national totals tend to mask state differences, the National Center for Education Statistics (NCES) requested that data for this survey be reported in sufficient detail to avoid misinterpretation. The past pattern of partial response and the need to employ supplemental data prompted NCES to try to obtain complete data from all respondents and have the data originate from the states only. In processing and analyzing the returns, NCES paid attention to the problem of duplicate registrations, the impact of adult vocational education, the extent of community college adult education, cooperativeely-offered programs, the increase in full-time instructional staff, the growth of adult education in smaller population groups, and the influence of population and school district size on adult education.

3

The Present Survey

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3
The Present Survey

The need for current data on adult education in the public schools was discussed at the 1968 meeting of the National Association of Public School Adult Education (now the National Association for Public Continuing and Adult Education–NAPCAE). To meet the need, the association asked the U.S. Office of Education (OE) to do a survey; a task force from the National Council of State Directors of Adult Education, an affiliate of NAPCAE, was appointed to provide advice. The task force, under the chairmanship of James Fling of Florida offered guidance and assistance throughout the study. John P. Moran of Maine and Richard Gartner of Texas assisted Mr. Fling as members.

Within the U.S. Office of Education, the National Center for Education Statistics (NCES) designated Imogene E. Okes the project sponsor. She worked with the task force to develop the questionnaire, define terms, and resolve problems as they occurred during the survey. The Council and NAPCAE received reports on the progress of the research at their annual meetings.

THE DESIGN

The task before the NCES staff was to design a survey that would come to grips with the situation in adult education so accurately and thoroughly that it might become the model survey in a field where experimentation with survey designs and incomplete data were commonplace. It was agreed that, to become a model, a survey would need to possess two characteristics: first, its data would need to be accurate and complete; second, the data would need to be comparable.

With these goals in mind, NCES decided that the survey would consist of statistics collected from the states, through the use of a standard survey form, on the number of students and instructors involved in public adult education in each state. The survey would ask the states to distinguish between those involved in federally-, state- or locally-sponsored programs (For a definition of "sponsored," see glossary.) and between those people involved part-time or full-time.

The decision to gather the data from the state agencies was made for several reasons. The state education department was a standard institution in every state; through the state, NCES contacts with the field could be centralized. In addition, by using the states, NCES hoped to make it easier for the survey to be repeated in the future and for the results to be comparable. And because the data were reported by state, they could be analyzed by state. Each state then, could make use of the data for its own purposes, and, because the survey was to be a complete (universe) study, each state could compare its own characteristics in public adult education with those identified by the survey in other states. Further, if and when the survey were to be repeated, each state could easily compare the new results with those of this first survey, and draw conclusions about state-wide trends. Finally, NCES was hopeful that, as they participated in this first survey, more state education officials would realize the extent of adult education activities in their state and that this realization might lead to their reporting those activities on a regular basis.

Early intentions were to collect adult education data only on programs in the public schools. Some states, however, objected that using this channel would eliminate their reports altogether. It was decided to extend the survey to include public community colleges. In each state, statistics were therefore collected from two administering authorities: the state education agency (referred to elsewhere as SEA) and the office responsible for public community and junior colleges (referred to as CC). It was decided that vocational education figures for adults could be reported as part of either or both of the reports from these two administering authorities. The choice was the individual state's.

A decision was also needed on how broadly to define adult education. NCES decided to use an inclusive definition because the larger number provides the greater reliability needed when adult education is being studied in relation to other variables.

Adult education was, therefore, defined as "organized instruction designed to meet the educational needs of persons beyond compulsory school age, whether or not they have interrupted or completed their formal full-time schooling."

Establishing the Data Base

Having decided to collect data from the states, NCES had next to determine which and how much data to collect. After consulting the task force, NCES decided that an important objective would be to gather comprehensive data

Table 1.--Coordinator appointed by chief State school officer to collect and report statistics for the survey on adult education in the public education system, by State or other area: United States 1968-69 and 1969-70

Table d.--Coordinator appointed by chief State school officer to collect and report statistics for the survey on adult education in the public education system, by State or other area: United States, 1968-69 and 1969-70

State or other area	Coordinator				
	Adult education		Statistical services		Other 2/
	State director	Administrator	CEDS* representative	Other services 1/	
50 States and D.C	27	8	6	7	3
Alabama	x	-	-	-	-
Alaska	-	x	-	-	-
Arizona	-	x	-	-	-
Arkansas	x	-	-	-	-
California	-	x	-	-	-
Colorado	-	x	-	-	-
Connecticut	x	-	-	-	-
Delaware	x	-	-	-	-
District of Columbia	x	-	-	-	-
Florida	-	-	-	-	x
Georgia	-	-	-	x	-
Hawaii	-	x	-	-	-
Idaho	-	-	x	-	-
Illinois	x	-	-	-	-
Indiana	x	-	-	-	-
Iowa	-	x	-	-	-
Kansas	x	-	-	-	-
Kentucky	x	-	-	-	-
Louisiana	x	-	-	-	-
Maine	x	-	-	-	-
Maryland	-	-	x	-	-
Massachusetts	-	-	x	-	-
Michigan	x	-	-	-	-
Minnesota	-	-	x	-	-
Mississippi	-	-	x	-	-
Missouri	x	-	-	-	-
Montana	-	-	x	-	-
Nebraska	x	-	-	-	-
Nevada	-	x	-	-	-
New Hampshire	x	-	-	-	-
New Jersey	x	-	-	-	-
New Mexico	x	-	-	-	-
New York	x	-	-	-	-
North Carolina	-	-	-	x	-
North Dakota	-	-	-	x	-
Ohio	-	-	-	-	x
Oklahoma	x	-	-	-	-
Oregon	x	-	-	-	-
Pennsylvania	x	-	-	-	-
Rhode Island	-	-	-	x	-
South Carolina	-	-	-	x	-
South Dakota	x	-	-	-	-
Tennessee	x	-	-	-	-
Texas	x	-	-	-	-
Utah	x	-	-	-	-
Vermont	x	-	-	-	-
Virginia	-	-	-	x	-
Washington	x	-	-	-	-
West Virginia	-	x	-	-	-
Wisconsin	-	-	-	-	x
Wyoming	-	-	-	x	-
Outlying areas	2	1	-	-	3
American Samoa	-	-	-	-	x
Canal Zone	-	-	-	-	x
Guam	-	-	-	-	x
Puerto Rico	x	-	-	-	-
Trust Terr., Pac. Is.	-	x	-	-	-
Virgin Islands	x	-	-	-	-

*CEDS - Committee on Educational Data Systems.

1/ Includes planning, research, and evaluation officers.

2/ Includes occupational and vocational specialists.

on a selected list of federally-funded (that is, sponsored) adult education programs.

Like earlier decisions, this one was made with the goal in mind of producing a comprehensive, accurate model survey that would result in comparable data. The federal programs had the attractive qualities of being found in most states, with some programs present in all, and of already being the subject of data reporting, because of federal accounting requirements. For these reasons, NCES supposed that once the states had reported data on these programs, it would be easy for NCES to compile the statistics and compare those received from each state.

The situation, however, turned out to be much more complicated. Indeed, enumerating the federal adult education programs became a research project in itself. At the time the survey was begun, the only resource available was the two-part inventory compiled on contract by Greenleigh Associates for the President's National Advisory Committees on Adult Basic Education and on Extension and Continuing Education (references 10 and 11) which listed programs in effect in 1967. By going through the programs one by one and identifying those which specified that public school systems were eligible for funding, NCES arrived at a list of 55 federally-sponsored adult education programs.

From these the task force was asked to select those programs they knew to be in operation in the greatest number of states. To this list of 24 federal programs NCES added three more and verified the currency of all 27. As soon as they became available, Quattlebaum's compilation of federal education programs (reference 29) and the directory of the federally-supported adult education programs compiled by the Adult Education Association/USA (reference 1) were examined to confirm the existence and importance of the 27 programs. These programs were then listed on the form of the present survey. (For the list, see text table J.)

Table J. The 27 selected federal programs: 1968-69 and 1969-70

	Program	Administering Agency	Description
1.	Adult Basic Education	U.S. Office of Education, Department of Health, Education, and Welfare (HEW)	Provides literacy education for adults age 18 and over. Their goal is to reach the 8th grade level of education.
2.	Adult Vocational Education	U.S. Office of Education, Department of HEW	Provides adults with training or retraining in occupational skills.
3.	Civil Defense Adult Education	Jointly administered by U.S. Office of Education and Department of Defense	Provides education in personnel and family survival, radiological monitoring, and shelter management training; initial and refresher courses for adult students and certification of teachers. Program being phased out.
4.	Manpower Development and Training	Jointly administered by U.S. Office of Education and Department of Labor	Institutional and on-job training and retraining for the unemployed and underemployed age 17 and over.
5.	Medical Self-Help Training	Public Health Service (Department of HEW)	Provides citizens with health and sanitation training for survival of natural or national disasters.
6.	Training of Workers with Older Americans	Administration on Aging, Social and Rehabilitation Service (Department of HEW)	Provides career training of social workers, housing managers, etc. on problems of the elderly.
7.	Training of Senior Citizens as School Aides	Administration on Aging, Social and Rehabilitation Service (Department of HEW)	Trains retired people to be part-time assistants in elementary and secondary schools.
8.	Self-support Education and Training of Parents	Community Services Administration, Social and Rehabilitation Services (Department of HEW)	Improves work skills and employability of persons over age 18 who are receiving aid to families with dependent children.
9.	WIN (Work Incentive Program)	Jointly administered by Community Services Administration, Social and Rehabilitation Services (Department of HEW) and the Department of Labor	Provides basic education and skill training to improve employability of men, women, and out-of-school youth age 16 and over in families receiving aid to dependent children. First offered in FY 69.
10.	Vocational Rehabilitation for Physically and Mentally Handicapped	Rehabilitation Services Administration, Social and Rehabilitation Services (Department of HEW)	Provides education to disabled adults to be self supporting; frequently a reimbursable service in regular school classes.

Table J. The 27 selected federal programs: 1968-69 and 1969-70—Continued

	Program	Administering Agency	Description
11.	Cuban Refugee Program	Social and Rehabilitation Services (Department of HEW)	Improves skills of Cuban refugees to help them become self sufficient.
12.	Agriculture and Home Economics Education	Federal Extension Service (Department of Agriculture)	Provides instruction in agriculture and home economics for farm families. Program reoriented also to serve low income urban families.
13.	Armed Forces Off-duty Volunteer Education Program for Military Personnel: Air Force, Army, Navy and Marines	Department of Defense	Offers high school completion courses to enlisted men on active duty. Sometimes contracted to public school systems in vicinity of military bases.
14.	Project 100,000	Department of Defense	Offers remedial and skill education to men normally rejected for military service to enable them to function while in military life and productively when they return to civilian life.
15.	Project Transition	Department of Defense	Designed to increase chances for employment in civilian life of men leaving the service.
16.	American Indians Adult Education and Employment Assistance	Bureau of Indian Affairs (Department of Interior)	Offers adult basic education, orientation for world of work, and skill training to American Indians and Alaskan natives.
17.	Citizenship Education and Training	Immigration and Naturalization Services (Department of Justice)	Provides classes in English language and American government for aliens who wish to become naturalized citizens of the U.S.
18.	Federal Prisoners Educational and Vocational Training	Bureau of Prisons (Department of Justice)	Offers literacy, high school completion, and skill training to prisoners to prepare them to successfully reenter society.
19.	Training in Corrections, Criminal Justice, Law Enforcement	Office of Law Enforcement Assistance (Department of Justice)	Provides law enforcement personnel with inservice professional, vocational, technical or subprofessional training to improve the quality of present and prospective correctional, criminal justice in state or local governments.
20.	Neighborhood Youth Corps	Jointly administered by Department of Labor and Office of Economic Opportunity	Provides literacy and occupational training to out-of-school youths age 16-21 from low-income families.
21.	New Careers	Jointly administered by Department of Labor and Office of Economic Opportunity	Develops subprofessional entry employment in the public services for unemployed low income adults; includes basic education.
22.	Operation Mainstream	Jointly administred by Department of Labor and Office of Economic Opportunity	Offers basic education and training in community beautification for one to nine hours of per week to chronically unemployed adults over age 22.
23.	Job Corps Training for Young Men and Women	1968-69, Office of Economic Opportunity; 1969-70, Department of Labor	Offers basic education and skill training to youths age 16-21, to help them obtain and retain a job.
24.	Migrant and Seasonal Farm Workers	Office of Economic Opportunity	Offers migrant and seasonal farm workers and non-English-speaking people vocational training ranging from brief evening sessions to extended day courses, to enable them to move into the community.

Table J. The 27 selected federal programs: 1968-69 and 1969-70—Continued

	Program	Administering Agency	Description
25.	Community Action Program	Office of Economic Opportunity	Supports locally-initiated programs in literacy and English as a second language for adults over age 18 of low income to prepare them to meet job training and employment requirements.
26.	VISTA (Volunteers In Service To America)	Office of Economic Opportunity	Trains volunteers to work in urban areas and deal with problems of education, home-making, health, recreation, etc.
27.	Management Development and Training	Small Business Administration	Provides present and potential small business owners, particularly American Indians, Negroes and members of the population who have a low income with daytime and evening instruction in the principles and functioning of management.

States were also requested to supply NCES with information on federal programs other than the 27 listed.

No less important than the data on federal programs was the data supplied by the states on locally- and state-sponsored programs. Rather than impose possibly irrelevant categories on the states in their reporting of these programs, NCES suggested none, on the assumption that the data supplied would sort itself out once it had all been compiled.

As desirable as it might have been to have detailed information about subjects taught, characteristics of students, financial arrangements, and other particulars relevant to adult education, NCES knew that most states would not have statistics on such information available. Therefore, it was decided to restrict the initial survey to the two most important items: numbers of students and numbers of instructors. But even these two items became complex when they were broken down into the categories of full-time and part-time, for two successive years (1968-69 and 1969-70), and from two administering authorities (SEA and CC).

After consulting with numerous people, NCES established the definition for full-time as 15 hours or more of teaching or learning per week. This was despite the fact that some states considered 20 hours as part-time; and that 12 hours was common. When returns came in, it was noted that the California education code stipulated ten hours or more per week as full-time.

Originally the plan was to collect data for one year only. But, as it became evident that the states would receive the survey form late in the school year, data were requested for the preceding year and estimates for the current year. (By the time returns came in, data for the second year were generally actual counts rather than estimates.) Thus NCES was able to make additional analyses about changes in adult education from one year to the next.

To minimize program duplication, it was decided that programs which were sponsored by more than one level of government would be reported under the highest level of government sponsorship. When the governmental level of sponsorship is mentioned, this generally means the primary (major) source of funding. Programs which received money from more than one federal source were to be reported under the principal contributor. Thus entries would not be repeated. In addition, respondents were asked to estimate the percentage of students which, according to their experience, were probably being counted twice. (See discussion on page 27 and table 3 for information on enrollment duplication obtained from this survey.)

The goal of producing reliable data was kept in mind by the NCES staff from the beginning to the end of the survey effort. Some of the measures undertaken to accomplish that goal were described earlier; others will be told of in the coming pages. Here, it is appropriate, perhaps, to summarize them all in one place:

1. Detailed data were specifically requested of the states on the 27 federal programs;
2. Data were obtained from all of the states, and only data from the states, as gathered for the current survey, were used;
3. Independent tests were run on 75 percent of the data;
4. Selected statistics from this survey were compared with statistics from other surveys in areas related to adult education; and
5. Rank-difference correlations were computed with selected statistics to indicate relationships.

Reviewing the Draft

The task force tested the feasibility of the survey instrument by circulating a draft to a few potential respondents. Their judgments were that the form could be completed without great difficulty and should yield the desired information.

A total of 57 persons were consulted about the design of the survey including adult education specialists, education data systems representatives, executives of professional associations, and officials in the U.S. Office of Education and

other federal agencies. They provided advice on form design, definitions, data items, federal programs, respondent reaction, data collection, and construction of table shells.

Approval of the survey was granted by the Bureau of the Budget (now Office of Management and Budget) in March 1970. The form was assigned the number OE-2323 and mailed to the states.

CONDUCTING THE SURVEY

Collecting the Data

On April 24, 1970, packages containing a letter of explanation, several copies of form OE-2323 with instructions, and a return postcard for reporting the name of the person designated to represent the state in coordinating adult education statistics were mailed to each Chief State School Officer (See appendix.). Copies were sent to the state Directors of Adult Education and to the state representatives on the Committee on Educational Data Systems (CEDS) for their information.

By telephone and by letter, NCES encouraged the states to assign coordinators to collect the statistics from the various sources within the state and prepare the data for submission. Table 1 shows that of the 57 coordinators, two-thirds were adult educators and one-third from statistical or vocational services.

The first two completed forms OE-2323 were received on May 22, 1970. By October 15, 1970, returns from ten states and four outlying areas were still outstanding. The last form was received in March, 1971.

Testing the Data's Quality

When about 75 percent of the returns were in, four tests were run to determine the adequacy of the data. The first test checked comprehensiveness in completing the survey form–the notion being that the degree of careful attention to the several items of information requested would be one index of the degree of confidence that could be placed in the information the state had provided. The states were graded by whether they had supplied an explanatory cover letter, information about duplication, parallel data for enrollments and instructional staff, data for both years, as well as by whether they had reported programs in groups or by specific program.

The second test compared the figures supplied by the states in 1968-69 for this survey with reports for the same year from the four Office of Education's adult education program offices: Adult Basic Education (ABE), Adult Vocational Education (AVE), Civil Defense Adult Education (CDAE) and Manpower Development and Training (MDT). Comparison of a state's individual programs with Office of Education program data revealed greater differences when programs were described separately than when statistics were summed for all four programs. In other words aggregated figures tended to hide discrepancies in the detail data.

Data on each of the four Office of Education adult education programs were checked in turn. For ABE, the figures gathered by the NCES survey were essentially the same as those gathered by the Adult Basic Education Office for its own purposes. In the few instances where there was a considerable difference between the two sets of figures for a particular state, the state coordinator responsible was contacted. In each case the explanation was that either community college figures had been included in the NCES survey count or that ABE program figures had been combined with several other similiar, smaller programs.

Explanations for why the vocational education figures of NCES and the OE program office differed were more general. They were that definitions posed a problem, that it was difficult to differentiate between adults and other kinds of students, that the Adult Vocational Education program in a particular state was so small that the data had not been worth collecting, that variations in adult education administration had influenced the reporting of the figures, that form OE-2323 requested only the public education portion of the adult vocational programs in the state, and that additional adult vocational education figures appeared elsewhere in that state's return.

This last reason was particularly true for Massachusetts, New Jersey and New York. The second to last reason applied to Arkansas, Idaho, and South Carolina which, although they had adult vocational education programs run by other state agencies, submitted no statistics for this public education report.

On the other hand, the story for the state of Washington is somewhat different. Here, the federal role in adult vocational education was inflated because of the reporting procedure established in form OE-2323 (See appendix.). States were requested to report all adult vocational education figures at the first occurring level of governmental sponsorship. The coordinator for the public community colleges in Washington, where the state education agency had no adult education figures to report, estimated his state sponsored six times as many adult vocational educational programs as the federal government; thus, the state of Washington's independent role here appears greatly deflated.

Reasons for discrepancies in reporting Civil Defense Adult Education were: that for this NCES survey, the Civil Defense report encompassed other programs or the Civil

Defense report was absorbed into other programs; that the Civil Defense program in the state was primarily for high school students and not for adults; that figures provided in OE-2323 were from certified attendance records; and that, in some states, many Civil Defense programs for adults were offered outside the public education system.

Discrepancies between NCES' statistics on the Manpower Development and Training programs and the Office of Education's may have existed for several reasons: first, a policy had not been set on whether only students who completed the program should be counted or whether starting students should be counted instead; second, some states integrated their figures into the figures of other programs; and third, some states had a program operating outside the public education system.

In all four cases, the USOE program officers reviewed the OE-2323 statistics, affirmed that absolute agreement with program figures could not be expected, and volunteered that the OE-2323 returns appeared quite reasonable. The fact that USOE program officers for Adult Basic Education, Adult Vocational Education, Civil Defense Adult Education, and Manpower, Development and Training accepted the survey findings in their areas provided independent verification for 39 percent of all the adult education enrollment statistics for 1968-69 reported in this survey.

In contrast to the four USOE programs, there seemed to have been serious over-reporting by some states when they gave figures for the federal agricultural programs. NCES turned to the person in the U.S. Department of Agriculture in Washington, D.C. who knew the most about agricultural extension activities in the U.S. for advice and his comments served as a basis for NCES' future discussions with the states. Specialists in the Vocational Rehabilitation office also helped NCES interpret the states' entries.

The third test compared the proportion of a state's population enrolled in adult education with the proportion enrolled in elementary and secondary education.

The fourth test compared returns from the current survey with figures for adult education from the *Biennial Survey* reported in the preceding year's publication, *Statistics of State School Systems, 1967-68* (reference 4).

When states were ranked or examined according to differences revealed in each of these tests, inadequacies, gaps or weaknesses in reporting became apparent. Comparing the state's figures for a particular federal program with those of the sponsoring government agency, as described above, also brought some interesting differences to light. Unfortunately, a full check with all agencies would have been an exceedingly time-consuming task; nor would the results have been extensive enough or accurate enough to make it worthwhile.

Finally, it should be pointed out that no effort was made by those of the NCES staff who worked on the survey to modify arbitrarily state data in order to make them agree with information from other federal sources.

Processing the Returns

When a little more than 80 percent of the forms had been returned, worksheets were designed to systematize the organization of the data. Eventually 20 different worksheets were used. Statistics on the returned forms were reviewed and transferred to these worksheets. In most cases transfer involved simply copying figures or tallying responses. Little editing was involved. It was necessary to derive categories for kinds of cooperating agencies and develop a scoring scheme for opinions about purposes of programs in order to handle these data. Worksheets made it easier to translate the numbers to percentages and rankings so that they could be analyzed and tabulated.

Hand processing, though a tedious task, seemed appropriate because there were only 57 respondents. Hand processing also permitted flexibility in working with the results of a first-time survey.

The detailed manner of data collection and the cooperation of states in providing data, coupled with the stringent testing and verification procedures, resulted in data of seemingly acceptable quality. Indeed, considering the ambiguities of the adult education area, the history of previous studies, and the fact that this was, in effect, a first-time effort, the quality of the data seemed impressive. All the data in the report were provided by the states and, as mentioned earlier, changes in the original data submitted were made only with the state's approval. No supplementary statistics were used.

Organizing the Data

Since this was essentially a first-time survey, no precedents inhibited the presentation of the data. Still, innovation had to be balanced by practical considerations and by earlier experience. Previous studies had provided clues as to what findings to expect. Several guidelines had indicated that specific data provided more insights about adult education than general totals—that the latter tend to camouflage or hide significant revelations.

This report was designed with these things in mind. Information is presented in the same order as the data had been elicited on the form. The flow of information is from administration of adult education to enrollment, instructional staff, ratios of students to teachers, and descriptions of programs. Sets of statistics are given for federal, state, and local governmental levels of sponsorship, for the 27 selected federally-funded programs, the four USOE programs, community and junior college programs, and cooperatively-offered programs. Enrollment, staff, and ratio figures are shown for full-time, part-time, percent of part-time to total, and change from one year to the next. Statistics are given state by state, for outlying areas, for the average state, and for the nation.

Figures progress from numbers, to percents, to ranks, and finally, to rank-difference correlations.

This report has been designed to place adult education statistics in perspective by relating the statistics to each other and to outside data. Though only a few such analyses are given, they illustrate how the data can be used.

ASSESSING THE DATA

How to Read the Tables

Mention of some aspects peculiar to this survey may ease and speed the use of the tables. In most of the tables the focus is on the full 1968-69 statistics reported by the states for adult education in the public education system excluding the four-year degree granting institutions. Yet myriad other subcategories are possible and in some cases even subsets of the subcategories. The data can be recombined or subtracted to arrive at new kinds of statistics.

As mentioned earlier, the original intention was to solicit data only for 1968-69. With the passage of time in implementing the survey it was judged feasible to request estimates for 1969-70 also. As it turned out, by the time form OE-2323 was received in the field, many states already had on hand the specific statistics for 1969-70; for instance this is apparent in the fact that very few of the returns came in as rounded numbers and only in rare instances did the change between the years reveal some fixed percentage increase for the set of numbers. Consequently, the data on adult education in the public education system for 1969-70 might profitably be employed for analyses similar to those undertaken here of the 1968-69 statistics.

Although data were requested on specific programs, states sometimes aggregated, or grouped, their data so that programs could not be differentiated. Consequently, when reference is made in this report to "line entries"—which are individual rows of data submitted—the distinction is made between "identifiable programs" and "grouped reporting" so that when specific data were submitted this can be recognized. Some programs (or line entires) reported in 1968-69 were not reported in 1969-70 and vice versa. This is noted in the statistics where pertinent.

As previously indicated, to avoid repetitive entries of statistics for programs sponsored at several governmental levels, respondents were asked to report data at highest level of government sponsorship. Consequently, data for federal and state sponsorships are somewhat artificially inflated, while information on local sponsorships is conservative.

Verifying the Data

During the winter of 1970-71 telephone calls were made to each state coordinator to verify, clarify, or supplement statistics submitted. Though some states admitted their reports were not complete, almost all said that figures given were representative of adult education in their states.

For the most part, the telephone conversations were helpful. They provided a means of enriching the data of the survey and further establishing its reliability. States had a second chance to modify their inputs. Questionable aspects of their reports were reviewed with them. In a few instances agreement was reached on a prorating procedure to fill gaps which otherwise would have been left incomplete. At the same time, to prevent input from the telephone conversations from slanting the results of the survey, changes in statistics were made only with permission of the state coordinator. Any bolstering, diminishing, or biasing of statistics was scrupulously avoided. As much concern was expressed to coordinators over possibly inflated figures as over those conceivably incomplete; telephone conversations resulted in changes in both directions. In most cases satisfactory explanations were offered for the original statistics; all other apparent discrepancies within program reports were satisfactorily resolved.

As shown in table 2, no consistent pattern of agency reporting on adult education has existed among the states. For every three states with a department of education as a primary source of reporting there is at least one state with a community college board reporting in its own right. Twelve states use both agencies as primary sources. The community college board is the sole primary reporting source in four states: Iowa, North Carolina, Oregon and Washington.

Most of the tables which follow provide two kinds of summarizing data. Each kind is useful, depending on the user's needs. Consider, for example, the data which describes the number of adults enrolled in adult education in public schools for the entire United States. The question is asked: what proportion of the total population is represented by this figure: One answer may be gained by adding together the numbers of people enrolled in each state and comparing that total with the figure of the total population for the country. A percentage can be computed which is an accurate figure, but, for some purposes, it is misleading. The reason is that the more populous states, like California and New York, have a significantly higher proportion of their populations enrolled than do many smaller states. The more populous states therefore contribute a disproportionate portion of the number of students enrolled to the total figure.

To compensate for this, and to provide data which might be more useful to an individual state, it is possible to take the same data and analyze it differently. First, compare the number of adults enrolled in adult education programs in public schools in one state with the total population of that

Table 2.--Administering agencies reporting, and contacted for adult education statistics, by State or other area: United States, 1968-69 and 1969-70

Table e.--Administering agencies reporting, and contacted for, adult education statistics, by State or other area: United States, 1968-69 and 1969-70

Agencies reporting 1/	Agencies or functions contacted 2/			
	State 3/ education agency (SEA)	Community 3/ or junior colleges (CC)	Vocational 3/ education	Other 4/
1	2	3	4	5
50 States and D.C. 5/	46X 12Y	16X 18Y	1X 47Y	1X 13Y
Alabama				
SEA	X 1/	Y 2/	Y	-
Alaska				
SEA	X	Y	Y	Y
Arizona				
SEA	X	Y	Y	-
CC	-	X	-	-
Arkansas				
SEA	X	-	Y	-
California				
SEA	X	Y	Y	-
CC	Y	X	Y	-
Colorado				
SEA	X	Y	Y	Y
Connecticut				
SEA	X	-	Y	-
CC	-	X	-	-
Delaware				
SEA	X	Y	Y	Y
District of Columbia				
SEA	X	-	Y	-
Florida				
SEA	X	Y	Y	Y
CC	-	X	-	-
Georgia				
SEA	X	-	-	-
CC	-	X	-	-
Hawaii				
SEA	X	Y	-	-
Idaho				
SEA	X	-	-	-
Illinois				
SEA	X	-	Y	-
Indiana				
SEA	X	-	Y	-
Iowa				
CC	Y	X	Y	-
Kansas				
SEA	X	Y	Y	Y
Kentucky				
SEA	X	-	-	-
Louisiana				
SEA	X	-	Y	-
Maine				
SEA	X	-	-	-

Table 2.--Administering agencies reporting, and contacted for adult education statistics, by State or other area: United States, 1968-69 and 1969-70--Continued

Table e.--Administering agencies reporting, and contacted for, adult education statistics, by State or other area: United States, 1968-69 and 1969-70--Continued

Agencies reporting 1/	Agencies or functions contacted 2/			
	State 3/ education agency (SEA)	Community 3/ or junior colleges (CC)	Vocational 3/ education	Other 4/
1	2	3	4	5
Maryland				
SEA	X	-	-	Y
CC	-	X	-	Y
Massachusetts				
SEA	X	Y	Y	-
CC	Y	X	Y	-
Michigan				
SEA	X	-	Y	-
Minnesota				
SEA	X	Y	Y	-
Mississippi				
SEA	X	Y	Y	-
Missouri				
SEA	X	-	Y	-
CC	Y	X	-	-
Montana				
SEA	X	-	Y	-
CC	Y	X	Y	-
Nebraska				
SEA	X	Y	Y	-
Nevada				
SEA	X	Y	Y	-
New Hampshire				
SEA	X	-	Y	Y
New Jersey				
SEA	X	-	-	-
New Mexico				
SEA	X	-	Y	-
CC	Y	X	Y	-
New York				
SEA	X	-	-	-
CC	Y	X	Y	Y
Other	-	-	-	X
North Carolina				
CC	Y	X	Y	-
North Dakota				
SEA	X	-	Y	-
Ohio				
SEA	X	-	Y	Y
Oklahoma				
SEA	X	-	Y	-
Oregon				
CC	Y	X	Y	-
Pennsylvania				
SEA	X	Y	Y	-
CC	Y	X	Y	-

Table 2.--Administering agencies reporting, and contacted for adult education statistics, by State or other area: United States, 1968-69 and 1969-70--Continued

Table e.--Administering agencies reporting, and contacted for, adult education statistics, by State or other area: United States, 1968-69 and 1969-70--Continued

Agencies reporting 1/	Agencies or functions contacted 2/			
	State 3/ education agency (SEA)	Community 3/ or junior colleges (CC)	Vocational 3/ education	Other 4/
1	2	3	4	5
Rhode Island				
SEA	X	-	Y	-
South Carolina				
SEA	X	-	Y	-
South Dakota				
SEA	X	-	Y	-
Tennessee				
SEA	X	Y	Y	-
Texas				
SEA	X	-	Y	-
Utah				
SEA	X	Y	Y	Y
Vermont				
SEA	X	-	Y	-
Virginia				
SEA	X	-	Y	-
Washington				
CC	Y	X	Y	Y
West Virginia				
SEA	X	-	Y	-
Wisconsin				
Vocational Education	Y	-	X	Y
Wyoming				
SEA	X	-	-	-
Outlying areas	4X	1X	4Y	-
American Samoa				
CC	-	X	Y	-
Canal Zone	-	-	-	-
Guam				
SEA	X	-	Y	-
Puerto Rico	X	-	Y	-
Trust Terr., Pac. Is.				
SEA	X	-	Y	-
Virgin Islands				
SEA	X	-	-	-

1/ Reporting agencies are identified with X.
2/ Agencies or functions contacted are identified with Y. Sometimes these are distinct and separate authorities; at other times they are a part of another agency. Contact indicates attempt by coordinator to collect data rather than actual receipt of statistics.
3/ Column headings are descriptive and not necessarily actual terms used by each State.
4/ "Other" includes educational agencies such as skill centers, extension services (excluding four-year college credit institutions), and two-year agricultural schools. Noneducational cooperating agencies are reported in a separate table.
5/ States were requested to submit separate forms reporting adult education administered by the State education agency and by the community colleges as appropriate. Therefore, the total number of reports submitted is more than 51.

state. A percentage is computed. This is done for each state; then the percentages are added together and divided by the number of states. The result is a figure which represents the percentage for an average state. In this case, each state, regardless of its population, is equally considered in the national picture.

In the survey, data for a few states seem to be underestimations; the true national figures would be somewhat higher. Statistical techniques could have been used here, but were not, to modify state figures upward. The figures were felt to be sufficiently accurate to avoid imputations by NCES; nevertheless, the user has information that can permit him to make adjustments according to his purposes. Though data for a few states may be incomplete, survey coordinators in all but one or two states said data reported were characteristic of adult education in their states, so that such indices as part-time to full-time enrollments, percentage changes in enrollment and staff figures between the two years, and ratios of enrollments to instructional staffs can generally be accepted.

Data on outlying areas are presented separately at the end of each statistical table. They are not included in the analytical tables.

Duplication

Possible duplication among figures for adult education in the public education systems remains a knotty problem. For a long period "enrollment" was admittedly defined as "cumulative registration." Over time the desire has increased for unduplicated counts.

As was mentioned earlier, special provision was made in form OE 2323 to attempt (a) to minimize duplicate program reporting and (b) to ascertain the proportions of the enrollment and staff statistics deemed to be duplicative. Combined and cooperatively-offered programs were to be reported only once on the survey form.

These instructions eliminated some duplication; other kinds were more difficult to control for. Because adult education courses can be informal and of short duration, precise records are not generally maintained for persons attending more than one activity sequentially or at the same time. Nevertheless, state coordinators were invited to file estimates on the amount of duplication present in the figures they submitted. Few chose to do so. One-quarter of the states submitted no data and then the estimates usually applied only to portions of their total returns.

During the telephone interactions with state coordinators, the problem of duplication was almost invariably discussed. The replies given were general statements of little, if any, quantitative value. A special worksheet was devised to record all relevant statistical data comments by the states on duplication. Table 3 shows the frequency of responses catergorized under general headings. Four states unequivocally declared their data represented unduplicated counts; the remaining states mostly hedged to varying degrees.

For each state that estimated some portion of their returns as duplicate counts, the percentage of duplication to total enrollment was determined. The resulting percentages for the states and the nation are conservative estimates of duplicates, or conversely, a liberal indication of non-duplicated registrations.

Table 3 suggests that the frequency of the occurrence of the same person appearing more than once in enrollment figures varies from state to state with a possible overall estimate of 10 percent. The hard data for duplicates, reported by the states, is less than 3 percent for total enrollments. For the 13 states which provided data on duplication in enrollments, the average is 8.36 percent duplication; for the six states which provided duplication data for instructional staff, the average is 10.28 percent duplication.

Another approach, different from that reflected in table 3, is to ignore the state totals and simply deal with the line entries or independent programs within states for which duplication data were offered. Data on the 23 such indpendent line entries on enrollments yielded a mean duplication of 12.59 percent. (For instructional staff, the 14 line entries had a mean percentage duplication of 12.44). Woodward (reference 49), dealing directly with school districts in 1958-59, found a reported duplicate rate in enrollment figures of 12.69 percent. Thus, the figures are very close. One can speculate that the true duplicate rate for enrollments falls somewhere between 7 and 13 percent for the nation with variations from this of 5 to 10 percent among the states.

Duplication remains a major problem. Perhaps the handling of duplication can be perfected in the future through improved record keeping, refinement of definitions, frequent surveying, and the application of sophisticated data processing.

PRESENTING THE DATA

Statistical Indices

To make it easier to read and interpret the statistics, the simplest statistical indices have been used. Each builds on the other. Progression is from numbers to percents to rank ordering to rank-difference correlations.

Use of Percents. Since numbers gain meaningfulness in relation to other numbers, the data in this report have generally been presented in percentages which describe the proportion's relation to the whole in a form which is ready to use without conversion. The total numbers on which percentages are based are also given so that further calcula-

Table 3.--Duplication information on figures for adult education enrollment and instructional staff, by State or other area: United States, 1968-69

Table f.--Duplication information on figures for adult education enrollment and instructional staff, by State or other area: United States, 1968-69

State or other area	No duplication	Attempt to provide unduplicated data	Some duplication, no amount indicated	Don't know or no information	Data of some kind on enrollment duplication	Percent of total State enrollment duplication	Data of some kind on instructional staff duplication	Percent of total State instructional staff duplication
50 States and D.C.	4	20	8	6	13	2.1	6	1.7
Alabama	-	-	x	-	-	-	-	-
Alaska	-	x	-	-	-	-	-	-
Arizona	-	x	-	-	-	-	-	-
Arkansas	-	-	-	x	-	-	-	-
California	-	-	-	-	x	3.2	-	-
Colorado	-	x	-	-	-	-	-	-
Connecticut	-	x	-	-	-	-	-	-
Delaware	-	x	-	-	-	-	-	-
District of Columbia	-	-	-	x	-	-	-	-
Florida	-	x	-	-	-	-	-	-
Georgia	-	x	-	-	-	-	-	-
Hawaii	-	-	-	-	x	20.0	-	-
Idaho	-	x	-	-	-	-	-	-
Illinois	-	-	-	-	x	1.9	-	-
Indiana	x	-	-	-	-	-	-	-
Iowa	-	-	-	-	x	15.4	-	-
Kansas	-	x	-	-	-	-	-	-
Kentucky	-	-	-	-	x	1.5	-	-
Louisiana	-	x	-	-	-	-	-	-
Maine	-	x	-	-	-	-	-	-
Maryland	-	-	-	-	x	11.2	x	9.3
Massachusetts	-	x	-	-	-	-	-	-
Michigan	-	-	x	-	-	-	-	-
Minnesota	-	-	-	x	-	-	-	-
Mississippi	-	x	-	-	-	-	-	-
Missouri	-	x	-	-	-	-	-	-
Montana	-	-	-	-	x	7.7	x	13.8
Nebraska	-	x	-	-	-	-	-	-
Nevada	-	-	-	x	-	-	-	-
New Hampshire	-	-	x	-	-	-	-	-
New Jersey	-	-	-	-	x	9.3	x	9.3
New Mexico	-	x		-	-	-	-	-
New York	-	-	x	-	-	-	-	-
North Carolina	-	-	-	x	-	-	-	-
North Dakota	x	-	-	-	-	-	-	-
Ohio	-	-	-	-	x	4.9	x	15.2
Oklahoma	-	x	-	-	-	-	-	-
Oregon	-	-	x	-	-	-	-	-
Pennsylvania	x	-	-	-	-	-	-	-
Rhode Island	x	-	-	-	-	-	-	-
South Carolina	-	-	-	-	x	10.0	-	-
South Dakota	-	-	-	-	x	8.2	x	12.0
Tennessee	-	-	x	-	-	-	-	-
Texas	-	x	-	-	-	-	-	-
Utah	-	x	-	-	-	-	-	-
Vermont	-	-	-	x	-	-	-	-
Virginia	-	-	-	-	x	.5	-	-
Washington	-	-	-	-	x	3.3	x	2.1
West Virginia	-	x	-	-	-	-	-	-
Wisconsin	-	-	x	-	-	-	-	-
Wyoming	-	-	x	-	-	-	-	-
Outlying areas	1	2	-	1	-	-	-	-
American Samoa 1/	-	-	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-	-	-
Guam	-	x	-	-	-	-	-	-
Puerto Rico	-	-	-	x	-	-	-	-
Trust Terr., Pac. Is.	x	-	-	-	-	-	-	-
Virgin Islands	-	x	-	-	-	-	-	-

1/ No report for 1968-69.

tions can be made. In this manner several things are achieved: the reader is provided with processed statistics, presented in a meaningful and readily available way, while the user can recalculate the data in any way he desires.

In this report, most percentages have been rounded to one decimal place. Obviously, some data are lost when statistics in the millions or seven figures are reduced to being represented by a percentage with only three digits. But convention and the greater ease for the mind to deal with the abbreviated representation argues for use of percentages. Faced, however, with the representation in percentage terms of adult education enrollments in the public education system as a function of a state's population (as was done in some of the analytical tables), rounding to two decimal places seemed appropriate, especially since most percentages were so small. Carrying decimals in these cases to two points, too, reduces the number of ties in rankings.

Use of Rankings. Rank ordering of the figures in a column has been done not only to make it easier for the eye to relate lengthy columns of figures to each other, but to help the reader compare different pieces of data. In this study the largest figure in the relevant column has been ranked "1" and the smallest number "51" with appropriate in-between rankings. Generally, the rankings have been based on percentages. When two or more states have had identical percentages, the same intermediate ranking has been given to each.

Of course using ranks to interpret the data should be done with caution. It is dangerous to draw inferences about absolute differences in original numbers based on differences in order of rank. This danger is accentuated when rankings are used that fall around the middle of the order—in this case "25"—since experience indicates that there will be a greater bunching or closeness of original numbers at this point than at either ends of the distribution. We must remember rankings only order things by magnitude; consequently, we cannot infer from rankings the absolute numbers on which they are based. For instance, the absolute difference in populations in the states ranked "2" and "3" is quite likely to be much greater than the difference in populations in states ranked "25" and "26." Such a likelihood is increased considerably as the distribution for population by states approaches that of the normal "bell-shaped" curve. In any case, rankings are excellent screening tools that can be most fully appreciated in combination with consideration of the absolute numbers on which they are based. They are also the preliminary step to computing rank-difference correlations.

Rank-Difference Correlations. Once the states have been ranked on the basis of more than one variable, it becomes possible to compare the pairs of rankings for two variables, or, more specifically, to compare the difference between the two rankings of one state with the general or, to oversimplify matters a bit, the "average" difference for rankings on the two variables for all states. This index of the degree of difference (or of relationship) between variables for all states is called the "rank-difference correlation," and the manner in which it is calculated is described below.

Why use rank-difference correlations? One answer is that rank-difference correlations can serve as a gauge of the quality of the data used to calculate them. If the data are not consistent, the rank-difference calculations will be skewed and show less of a relation where there might have been a greater one.

Rank-difference correlations also have practical uses. An individual state, for example, may compare its rankings on two different subjects or variables with the national rank-difference correlations computed here and draw highly accurate and interesting conclusions about how that particular state fares when compared to other states. If the rank-difference correlation for a particular comparison is high, that is, if most of the states do fall into the same kind of order when compared on that particular set of two variables, then the individual state can confidently expect his state's rankings to similarly fall into place. If they do not, then the state should look for causes, try to identify what it is that is causing his state to deviate to that extent and, if desired, make changes accordingly. Or the state may be satisfied, especially if the difference reflects well.

On the other hand, if the correlation between the states on those two variables is low, that tells the state something else entirely. In that case, the individual state need not be concerned about not having rankings that are similar, since the rank-difference correlation indicates that most states have unrelated rankings. Illustrations and applications of these points are provided later in the analytical section of this report (pages 91-126). In the end, each state, of course, must decide what is in its best interest, but these statistical tools provide a useful perspective and one that may be useful to those who make policy.

The statistic used to summarize the degree of relationship between two variables in this study is called the rho or Spearman rank-difference correlation. This statistic is produced by one of the less sophisticated correlational techniques available, one that is usually employed for screening purposes. With large samples—and a sample of 51 falls in this category—the value of the rank-difference correlation is actually likely to be similar to that of the more sensitive and sophisticated Pearson correlation.

The formula for the Spearman rank-difference correlation is

$$\text{rho} = 1 - \frac{6\Sigma D^2}{N(N^2-1)}.$$

D is the difference between two ranks for a state and N is the number of pairs of ranks to be compared—here 51. Σ is, of course, the symbol for summation. (Garrett—reference 6—provides a detailed explanation of this technique.)

Correlations range from a perfect negative relationship of -1.00, through no relationship of 0.00, to the +1.00 of a complete positive relationship. For an example of a perfect negative relationship or correlation (-1.00) we can turn to the two ends of a seesaw. As the seesaw tilts there is a perfect negative relationship between the distance end A is off the ground compared with that of end B. Most likely there is no relationship at all (0.00) between the number of traffic tickets written in Los Angeles over time and the number of times lights are switched on in your home. A perfect positive correlation (+1.00) is exemplified by the effect of the length of the radius of a circle on the length of the circumference of that circle; they vary directly. But, in nature a perfect correlation is the exception rather than the rule. In the abstract one might consider a correlation of ±.20 minimal or negligible; of ±.40 small; of ±.60 moderate; and of ±.80 high. Actually, the significance of the magnitude of a particular correlation must be evaluated in the context of expectations.

Interpreting Rank-difference Correlations. The fact that a correlation exists does not necessarily establish a causal connection between the two variables. The values (or the numbers) of both variables may be caused by a third variable or phenomenon or by a complex of them.

Let us take the example above for zero correlation. If the nation goes through a series of crises for energy, there may develop a positive (or negative) correlation between tickets written and light switching. But neither one causes the other. Both vary together because each is influenced by the same factor: the lack of energy. Moreover, when a causal nexus does exist one cannot necessarily tell from the correlation which variable was responsible for changes in the value of the other. Unfortunately, human judgment may be needed. These cautions may seem banal for most, but all of us, at some time at least, may have only just managed to skirt these pitfalls.

Rank-difference correlations based on data from a sample face the problems of the adequacy of the size of the sample and the possibility of bias resulting from how the sample was selected. Neither of these problems confront the present study since the sample and the universe are the same: the 50 states and the District of Columbia.

Nevertheless, the accuracy of correlations in this study will depend on the accuracy or validity of the numbers on which the ranks are based. When there is random error, for instance, in measuring the height of both ends of the seesaw from the ground, it is unlikely we will get a perfect negative correlation (-1.00). In this study it can be assumed that some states under-reported the number of adult education enrollments (still fewer states may have over-reported numbers). Therefore, ranks based on such enrollment when related to ranks for state population are likely to give a correlation not completely accurate and one that, more than likely, is smaller than it should be. Some notion, however, of the accuracy for ranks on enrollment can be gained from the size and consistency with which correlations are obtained with variables such as state population and higher education enrollment.

Regarding the stability of correlational size over time, personal judgments must be used until more statistical data become available. The present analyses will show, however, a small, but persistent, positive correlation between a state's population and the public school adult student portion of that population, taken at three points in time, each about a decade apart.

Reliability of National Indices

Finally, in general it can be said that the data in this report are probably under-reported. Possible under-reporting by specific states can be identified through statistical inferences. The number of missing programs appears quite small and it is unlikely to bias seriously any overall results. Indices on the national level should be solidly based and likely to vary only slightly, if at all, with addition of data on the missing programs. Most indices such as percentages for changes between years and ratios derive their reliability from representativeness of data and not necessarily from the completeness of figures.

All states except one or two asserted that their data were representative, or charateristic, of adult education in their state. Knowing which programs were reported and which office handled the reporting, the reader can judge the completeness of a state's data. The quality of a state's adult education statistics in the present survey can also be evaluated by looking at the state's previous performance in data collection in this area. With these reassurances in mind, the data are presented with confidence. For this survey, the challenge was to arrange the statistics in a useful form.

4
The Data

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Tables: All tables contained in this chapter are listed on pp. iv-vi in the Table of Contents.

4
The Data

This chapter contains all the possibly critical data elicited by form OE-2323. The attempt has been made to arrange the material in a helpful manner. The organization is meant to encourage persons interested in adult education in public schools to re-analyze the data according to their own needs.

The flow of information in the tables which follow begins with data on administration of adult education programs and moves through enrollment and instructional staff statistics to ratios and purposes of programs to an analytical presentation of data, both internal and external to this survey, for purposes of comparison and correlation.

Before proceeding, it may be helpful to present some definitions. In the general instructions supplied with form OE-2323 (appendix), a program is defined as "a major agency endeavor, mission-oriented, which fulfills statutory or executive requirements, and which is defined in terms of the principal actions required to achieve a significant objective." In the survey, a program could be anything from a regular city adult education program to something like VISTA. An "identifiable program" is defined in the survey to mean any program which the reporting agency described with one of the following facts: the subject, the target group, whether or not credit was given, the program's location within the state or some other useful identification. Data from a single line entry which was not ascribed to an "identifiable program" was labelled a "group reporting." (In a group reporting there had to have been at least one program.) These occurred only at the state or local level. No attempt was made to infer the number of possible programs from the size of the statistics on enrollment and instructional staff. From the information presented in table 4 it is possible to calculate that of the 433 line entries due to the state and local governments, only 35 or 8.1 percent were labelled by NCES as "group reportings."

TRENDS AND OBSERVATIONS ABOUT THE PROGRAM SPONSORS

The three tables in this subsection present statistics on the program sponsors and introduce the categories used by NCES to group the programs.

Table 4 shows the number of programs reported by each state. These programs are divided into categories by level of governmental sponsorship: federal, state, and local. (For a definition of "sponsorship," see the glossary.) The number in each level varies greatly from state to state. Not surprisingly, given the increase in federal governmental support this country has witnessed in recent years, 51.1 percent of the programs in public school adult education reported on in table 4 are federally-sponsored. However, because some state and local programs are counted as group reportings and because the states were told to report a program under its highest level of sponsorship, the 51.1 percent is probably an inflated figure. Likewise, the number of identifiable programs sponsored by the lowest governmental or local level within the states is probably higher than 27 percent of all identifiable programs in the survey. On the average each state supplied statistics for 17 programs.

Of all the programs which were reported on in the survey (see column 2 of table 4), at least 23.1 percent (205 programs) were administered by a community college. Of these 205 programs, 36.6 percent were locally- rather than

Table 4.--Number of programs reported and grouped reportings submitted by each State reporting agency for adult education in public education system according to the different levels of governmental sponsorship, by State or other area: United States 1968-69 and 1969-70

Table 1.--Number of programs reported and grouped reportings submitted by each State reporting agency for adult education in public education system according to the different levels of governmental sponsorship, by State or other area: United States 1968-69 and 1969-70

State reporting agency (and agency reported, when different) 1/	Total number of programs 2/ reported	Level of governmental sponsorship 3/					
		Federal		State		Local	
		Number of identifiable programs		Number of identifiable 5/ programs	Grouped 6/ reportings	Number of identifiable 5/ programs	Grouped 6/ reportings
		Selected 4/	Other				
1	2	3	4	5	6	7	8
50 States and D.C. 7/	886	414	7/ 39	7/ 168	23	230	12
State Education Agency (SEA)	644	317	25	123	15	134	10
Community College (CC)	203	66	12	44	8	73	2
Both SEA and CC 8/	20	17	-	-	-	3	-
Other	17	14	2	1	-	-	-
State average 9/	17.4	8.1	0.8	3.3	0.5	4.5	0.2
Alabama	11	-	-	-	-	-	-
SEA	-	10	-	-	-	-	-
(CC)	-	-	-	-	1	-	-
Alaska	53	-	-	-	-	-	-
SEA (Combined report) 10/	-	14	*2	17	-	20	-
Arizona	23	-	-	-	-	-	-
SEA	-	1	-	1	-	-	-
CC	-	4	-	5	-	8	-
Both SEA and CC 8/	-	4	-	-	-	-	-
Arkansas	6	-	-	-	-	-	-
SEA	-	5	-	-	1	-	-
California	37	-	-	-	-	-	-
SEA	-	-	-	16	-	-	-
(Combined report) 10/	-	5	-	-	-	-	-
CC	-	-	-	-	-	16	-
Colorado	22	-	-	-	-	-	-
SEA (Combined report) 10/	-	21	-	-	-	1	-
Connecticut	9	-	-	-	-	-	-
SEA	-	5	1	-	1	-	-
CC	-	-	-	-	2	-	-
Delaware	25	-	-	-	-	-	-
SEA	-	9	-	3	-	12	-
(Combined report) 10/	-	-	-	-	1	-	-
District of Columbia	9	-	-	-	-	-	-
SEA	-	6	1	-	2	-	-
Florida	22	-	-	-	-	-	-
SEA	-	5	1	2	-	-	1
CC	-	5	2	-	-	1	1
Both SEA and CC 8/	-	4	-	-	-	-	-
Georgia	8	-	-	-	-	-	-
SEA	-	5	2	-	-	-	-
CC	-	3	-	-	-	-	-
Hawaii	18	-	-	-	-	-	-
SEA	-	11	3	4	-	-	-
Idaho	3	-	-	-	-	-	-
SEA	-	3	-	-	-	-	-
Illinois	11	-	-	-	-	-	-
SEA	-	6	-	-	-	-	1
(Combined report) 10/	-	-	-	4	1	-	-
Indiana	10	-	-	-	-	-	-
SEA	-	8	-	*1	-	-	-
Iowa	32	-	-	-	-	-	-
CC	-	0	*1	19	-	-	-
(SEA)	-	-	-	-	-	1	-
Kansas	26	-	-	-	-	-	-
SEA (Combined report) 10/	-	7	-	19	-	-	-
Kentucky	5	-	-	-	-	-	-
SEA	-	5	-	-	-	-	-
Louisiana	10	-	-	-	-	-	-
SEA	-	8	*1	1	-	-	-
Maine	5	-	-	-	-	-	-
SEA	-	4	-	-	1	-	-
Maryland	42	-	-	-	-	-	-
SEA	-	5	7	-	5	5	-
CC	-	2	3	-	5	5	-
Both SEA and CC 8/	-	5	-	-	-	-	-
Massachusetts	15	-	-	-	-	-	-
SEA	-	4	10	-	-	-	-
Both SEA and CC 8/	-	1	-	-	-	-	-
Michigan	5	-	-	-	-	-	-
SEA	-	5	-	-	-	-	-
Minnesota	10	-	-	-	-	-	-
SEA	-	9	-	-	-	-	1
Mississippi	4	-	-	-	-	-	-
SEA (Combined report) 10/	-	4	-	-	-	-	-
Missouri	27	-	-	-	-	-	-
SEA	-	9	-	-	-	12	-
CC	-	-	-	-	-	6	-
Montana	17	-	-	-	-	-	-
SEA	-	8	*1	-	-	3	-
CC	-	-	-	-	-	1	-
Both SEA and CC 8/	-	1	-	-	-	3	-
Nebraska	30	-	-	-	-	-	-
SEA	-	-	-	-	-	6	-
(CC)	-	-	-	-	-	2	-
(Combined report) 10/	-	16	*1	5	-	-	-
Nevada	7	-	-	-	-	-	-
SEA	-	7	-	-	-	-	-
New Hampshire	48	-	-	-	-	-	-
SEA	-	9	16	-	-	23	-
New Jersey	6	-	-	-	-	-	-
SEA	-	4	-	-	1	-	1

Table 4.--Number of programs reported and grouped reportings submitted by each State reporting agency for adult education in public education system according to the different levels of governmental sponsorship, by State or other area: United States 1968-69 and 1969-70--Continued

Table 1.--Number of programs reported and grouped reportings submitted by each State reporting agency for adult education in public education system according to the different levels of governmental sponsorship, by State or other area: United States 1968-69 and 1969-70--Continued

State reporting agency (and agency reported, when different) 1/	Total number of programs 2/ reported	Level of governmental sponsorship 3/					
		Federal		State		Local	
		Number of identifiable programs		Number of identifiable 5/ programs	Grouped 6/ reportings	Number of identifiable 5/ programs	Grouped 6/ reportings
		Selected 4/	Other				
1	2	3	4	5	6	7	8
New Mexico	31	-	-	-	-	-	-
SEA	-	9	**1	8	-	5	-
CC	-	-	-	8	-	-	-
New York	52	-	-	-	-	-	-
SEA	-	2	-	1	-	32	-
CC	-	2	2	5	-	5	-
Both SEA and CC 8/	-	2	-	-	-	-	-
Other: Cooperative exts	-	1	-	-	-	-	-
North Carolina	6	-	-	-	-	-	-
CC	-	5	-	1	-	-	-
North Dakota	6	-	-	-	-	-	-
SEA	-	4	-	*2	-	-	-
Ohio	6	-	-	-	-	-	-
SEA	-	4	-	1	-	-	1
Oklahoma	6	-	-	-	-	-	-
SEA	-	6	-	-	-	-	-
Oregon	15	-	-	-	-	-	-
CC	-	13	-	-	1	-	1
Pennsylvania	39	-	-	-	-	-	-
SEA	-	3	-	4	-	1	-
CC	-	4	*2	5	-	20	-
Rhode Island	9	-	-	-	-	-	-
SEA	-	6	-	2	-	-	1
South Carolina	11	-	-	-	-	-	-
SEA	-	4	4	*2	-	-	1
South Dakota	11	-	-	-	-	-	-
SEA	-	10	-	-	-	-	1
Tennessee	6	-	-	-	-	-	-
SEA	-	-	-	-	-	-	1
CC	-	-	-	-	1	-	-
(combined report) 10/	-	4	-	-	-	-	-
Texas	37	-	-	-	-	-	-
SEA	-	13	-	-	-	24	-
Utah	11	-	-	2	-	-	-
SEA [Combined report] 10/	-	8	-	2	-	1	-
Vermont	7	-	-	-	-	-	-
SEA	-	7	-	-	-	-	-
Virginia	15	-	-	-	-	-	-
SEA	-	1	-	2	-	7	-
Washington	30	-	-	-	-	-	-
CC	-	19	2	2	-	7	-
West Virginia	14	-	-	-	-	-	-
SEA	-	13	-	-	-	-	1
Wisconsin	16	-	-	-	-	-	-
Other: Vocational ed	-	13	2	1	-	-	-
Wyoming	4	-	-	-	-	-	-
SEA [Combined report] 10/	-	4	-	-	-	-	-
Outlying areas	55	23	-	9	3	-	-
American Samoa	10	-	-	-	-	-	-
CC	-	*5	-	*5	-	-	-
Canal Zone 11/	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-
SEA	-	4	-	-	1	-	-
Puerto Rico	11	-	-	-	-	-	-
SEA	-	-	-	1	-	-	-
Trust Terr., Pac. Is.	1	-	-	-	-	-	-
SEA	-	3	-	-	*1	-	-
Virgin Islands	5	-	-	-	-	-	-
SEA	-	4	-	-	1	-	-

1/ When one agency submitted the report for another agency, the second agency is shown in parentheses. For instance, frequently the SEA submitted a separate report for the community colleges, and vice versa.

2/ These are numbers of line entries per State, including both identifiable programs and grouped reportings. These figures provide the bases for later analyses of descriptions of programs.

3/ To avoid duplicate entries when programs had multigovernment sponsorship, the instructions were to enter data at at time of first occurrence. Therefore, entries in the Federal column may include programs which had State and local sponsorship also, and the State column may include programs locally sponsored. As this applies throughout the report, this explanation will not be repeated.

4/ See table five for distribution, and table 1 for identification, of the 27 selected federally sponsored programs.

5/ Programs which were identified by subject, target group, credit given, location or other categorization.

6/ General summarization precluding specific identification.

7/ Includes nonrecurring programs. The 886 total includes one program in 1968-69 only and 12 new ones in 1969-70, as well as grouped reportings.

8/ Both the State education agency and community colleges provided independent but not duplicated data for the same program.

9/ States were equally weighted; to obtain State average, add column and divide by 51. This applies throughout the report.

10/ Precise administering agency or function is obscure and therefore the report is considered to be a combined report covering the State education agency, community college, and other.

11/ Canal Zone does not have any adult instructional programs, although it administers the high school or GED test. This explanation will not be repeated.

* Programs reported for 1969-70 only; of the two identifiable State programs reported by South Carolina, one was for 1969-70 only.

** Program reported for 1968-69 only.

state- or federally-sponsored. (The comparable figure for departments of education was 25.5 percent.)

Finally, it is interesting to note that of the 851 identifiable programs, 838 or 99 percent were reported as being in operation in the United States during both 1968-69 and 1969-70. Of the 13 programs which were reported as being in operation in no state during one of the years, one was in 1968-69; the rest appeared for the first time in any state in 1969-70. Of those twelve, half were for some kind of occupational training or upgrading.

The 27 Selected Federal Programs

Table 5 indicates the participation by the states and outlying areas' public education systems in one or more of the 27 federal programs. (The process by which the programs were selected is discussed earlier, in Chapter 2, "The Present Survey.") These programs were specifically listed in OE-2323; if the reporting agency needed to report on other federal programs, additional space was provided.

For the 27 selected federal programs, 414 independent entries were made in one year or the other by individual states; 375 of them occurred for the same states both in 1968-69 and 1969-70. Of the nonrecurring programs, 11 percent were in 1968-69 only. Of the 89 percent newly operated by the public education system in 1969-70, 29 percent were for the WIN (Work Incentive) program. (The adding or dropping of one of the 27 federal programs in a particular state was not considered to affect a change in that program's status as one of the 27 federally-sponsored identifiable program. While the *total* number of identifiable programs was affected by the continuation or termination of any "other" federally-, state- or locally-sponsored program.)

Eight was the average number of federal programs reported per state. Adult Basic Education (ABE), Adult Vocational Education (AVE), Civil Defense Adult Education (CDAE), and Manpower, Development and Training (MDT) were the four most frequently mentioned. All were sponsored by the U.S. Office of Education. Text table J provides the names and brief descriptions of the 27 programs.

Other Federal Programs

As table 4 reveals, the reporting agencies made 39 mentions of other federal programs; in a few cases the same program was mentioned by more than one state. A few patterns emerged. Seven states were offering occupational training under such programs as Project Hire, Educational Guidance and Opportunities, Vocational Upgrading, Concentrated Employment Program, New Careers, Career Development and JOBS. With money provided by the Educational Personnel Development Act of 1965 and Title I of the Higher Education Act of 1967, six states had offered workshops for training of teachers or teacher aides. The Veterans' Training Program was mentioned three times; Head Start, which has a parent education component, was also mentioned three times.

Two of the programs listed served older Americans: Enrichment of Living for Residents in Nursing Homes and Training of Senior Citizens in Adult Education. Dealing specifically with urban problems were such programs as Model Cities, Neighborhood Improvement, Urban Centers, and Urban League. One program was oriented to Rural Social Services. The Drug Abuse program and the National Highway Safety program were also mentioned.

State and Local Programs

It was difficult to categorize the state and local programs because there was so much variety. This was particularly true because the instructions which accompanied OE-2323 asked that the programs be listed "as ordinarily reported in your state." As a result, some programs were enumerated by subjects taught, while others were identified by target group, geographic area, funding source or method of instruction.

Subjects were listed generally and specifically by academic or occupational descriptions: English, math, social studies, fine arts, citizenship, parliamentary procedures, beef cattle production, auto mechanics, electronics, health and nutrition, personal enrichment, and so on.

Several programs were described by teaching method: tutorial programs, class instruction, lecture series, discussion groups, sales clinic, guidance conference, teacher workshops, and surveying seminar.

For special target groups there were listings for food handlers, fire service, drivers, parents, aliens, farmers, senior citizens, workers, and American Indians.

Some programs were identified by the place where they were held: Armstrong High School, Law Enforcement Academy, Opportunities Industrial Center, Division of Corrections, State Reformatory and State Prison.

Others were identified by geographic location: county, Colebrook, Clovis, Dexter, Langley, and Whitefield.

Funding sources were cited as minimum foundation support, tuition support, and fee. One was described legislatively as Act 252.

And some programs were described simply as adult general education, or standard evening high school.

However, some of the data collected on the state and local programs were more uniform. Under the five descriptive categories given in columns 14 through 18 of the form, respondents were asked to indicate for each program or line entry of statistics provided whether the program should be described as basic education, high school equivalency or GED, occupational training, general and college subjects, or other. Analyses of these data appear in later tables in this report in the section on "Data on the Purposes of Programs."

Table 5.--State-reported participation in 27 selected federally sponsored adult education programs in the public education system, by State or other area: United States 1968-69 and 1969-70

Table 2.--State-reported participation in 27 selected federally sponsored adult education programs in the public education system, by State or other area: United States 1968-69 and 1969-70

State or other area	State-reported participation in 27 selected federally sponsored programs (see table a for identification)																											
	Number	Percent 1/	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
50 States and D.C.	414	-	51	48	45	48	13	7	1	2	32	20	1	10	5	3	10	10	8	9	14	15	10	10	5	11	12	5	9
State average	8	30.1																											
Alabama	10	37.0	x	x	x	x	x	-	-	-	x	x	-	-	x	-	-	-	-	x	x	-	-	-	-	-	-	-	-
Alaska	14	51.9	x	x	x	x	-	-	-	-	x	x	-	-	-	-	-	x	-	-	x	x	x	x	-	-	x	x	x
Arizona	9	33.3	x	x	-	x	-	-	-	-	x	-	-	-	-	-	x	x	-	x	-	-	-	-	-	x	x	-	-
Arkansas	5	18.5	x	-	-	-	-	-	-	-	x	x	-	-	-	-	-	-	-	-	x	x	-	-	-	-	-	-	-
California	5	18.5	x	x	x	x	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	21	77.8	x	x	x	x	x	x	-	x	x	x	-	x	-	-	-	x	x	x	x	x	x	x	x	x	-	x	x
Connecticut	5	18.5	x	x	x	x	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	9	33.3	x	x	x	x	-	x	-	-	x	x	-	-	-	-	-	-	-	-	x	x	-	-	-	-	-	-	-
District of Columbia	6	22.2	x	x	x	x	-	-	-	-	x	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-
Florida	14	51.9	x	x	x	x	-	-	x	-	x	x	x	-	x	-	-	x	-	-	x	x	x	-	-	x	-	-	-
Georgia	6	22.2	x	x	x	x	-	-	-	-	x	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-
Hawaii	11	40.7	x	x	x	x	-	-	-	-	x	-	-	-	x	-	-	-	-	-	x	x	-	x	x	-	x	-	-
Idaho	3	11.1	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-
Illinois	6	22.2	x	x	x	x	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-
Indiana	8	29.6	x	x	x	x	-	-	-	-	x	x	-	-	-	-	-	-	x	-	x	-	-	-	-	-	-	-	-
Iowa	9	33.3	x	x	x	x	x	-	-	-	x	x	-	-	-	-	-	-	-	-	-	-	x	-	-	-	x	-	-
Kansas	7	25.9	x	x	x	x	-	-	-	-	x	-	-	x	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-
Kentucky	5	18.5	x	x	-	x	-	-	-	-	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana	8	29.6	x	x	x	x	-	x	-	-	x	-	-	-	-	-	-	-	x	-	x	-	-	-	-	-	-	-	-
Maine	4	14.8	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	12	44.4	x	x	x	x	x	-	-	-	x	-	-	-	-	-	x	-	x	-	-	x	-	-	-	x	x	-	x
Massachusetts	5	18.5	x	x	x	x	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	5	18.5	x	x	x	x	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota	9	33.3	x	x	x	x	x	-	-	-	x	x	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	x
Mississippi	4	14.8	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	9	33.3	x	x	x	x	-	-	-	-	x	-	-	-	-	-	x	-	-	-	-	x	-	x	-	-	x	-	-
Montana	9	33.3	x	x	x	x	x	-	-	-	x	x	-	-	-	-	-	x	-	-	-	-	x	-	-	-	-	-	-
Nebraska	16	59.3	x	x	x	x	x	x	-	-	x	x	-	x	-	x	x	x	x	-	-	x	-	-	-	-	x	x	-
Nevada	7	25.9	x	x	x	x	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	x	-	x	-	-	-
New Hampshire	9	33.3	x	x	x	x	x	x	-	-	-	x	-	x	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-
New Jersey	4	14.8	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico	9	33.3	x	x	-	x	-	-	-	-	-	x	-	-	x	x	x	-	-	-	-	x	-	x	-	-	-	-	-
New York	7	25.9	x	x	x	x	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	x	x	-	-
North Carolina	5	18.5	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-
North Dakota	4	14.8	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio	4	14.8	x	x	-	x	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma	6	22.2	x	x	x	x	-	-	-	-	x	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-
Oregon	13	48.8	x	x	x	x	x	-	-	-	x	-	-	-	-	-	-	x	-	-	x	-	x	x	x	x	-	-	x
Pennsylvania	7	25.9	x	x	-	x	-	-	-	x	-	-	-	-	-	-	-	-	-	x	x	-	-	-	-	-	-	-	x
Rhode Island	6	22.2	x	x	x	x	-	-	-	-	x	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	4	14.8	x	-	x	x	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota	10	37.0	x	x	x	x	x	-	-	-	x	x	-	-	-	-	-	x	-	-	-	x	-	-	-	-	-	x	-
Tennessee	4	14.8	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	13	48.2	x	x	x	x	-	-	-	-	x	-	-	-	-	-	x	x	-	x	-	x	x	x	-	x	-	-	x
Utah	8	29.6	x	x	x	-	x	-	-	-	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x	-	x
Vermont	7	25.9	x	x	x	x	-	-	-	-	-	-	-	x	-	-	-	-	x	-	-	-	x	-	-	-	-	-	-
Virginia	4	14.8	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Washington	19	70.4	x	x	x	x	x	x	-	-	x	-	-	-	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x
West Virginia	13	48.2	x	x	x	x	-	-	-	-	x	x	-	x	-	-	-	-	-	-	x	x	x	x	x	-	x	-	-
Wisconsin	13	48.2	x	x	x	x	x	x	-	-	x	x	-	x	-	-	-	-	-	-	x	-	-	-	-	x	x	x	-
Wyoming	4	14.2	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Outlying areas	23	17.0	5	4	1	5	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	2	1	-	1	-	-	1	-
American Samoa	5	18.5	x	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	x	-
Canal Zone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guam	4	14.8	x	x	-	x	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	7	25.9	x	x	x	x	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	x	-	x	-	-	-	-
Trust Terr., Pac. Is.	3	11.1	x	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands	4	14.8	x	-	-	x	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-

1/ Percent of the 27 selected Federal programs reported by the State.

Cooperatively-offered Programs

Adult education programs are sometimes offered by a public education system in cooperation with another agency or organization. When this occurred, the survey coordinators were asked to specify the name of the cooperating agency. The ways they cooperated varied from sharing funding, teachers, curriculum, or facilities, to students or administrators. The intent of the survey item was not to measure the kind and amount of cooperation but "to ascertain only whether cooperation exists and with whom." The tabulations and percentages in table 6 exclude the line entries representing grouped or aggregated reporting; cooperating agency data were not reported in these cases.

A little over one quarter of the 839 identifiable independently operating programs reported by the 50 states and the District of Columbia in 1968-69 were cooperatively-offered programs. This figure can be broken down further: a third, or 36 percent of the federally-sponsored programs, 15.2 percent of the identifiable state programs and 15.2 percent of the identifiable local programs were cooperatively arranged. Laws authorizing federal programs generally encourage agencies to offer programs cooperatively. This seems to be reflected in the fact that there are more than twice as many cooperatively-offered, federally-sponsored programs as there are cooperatively-offered, state-sponsored or locally-sponsored programs.

It was requested that cooperatively-offered programs be reported at the first, which was most often the federal, level of government sponsorship. The possibility that this request had distorted the data proved not to be a problem because in each case neither of the pair of cooperating agencies listed by the 50 states and District of Columbia belonged to the public education system.

Earlier research into cooperative programs, while not extensive, suggests that cooperation between agencies in sponsoring adult education programs has a greater likelihood of occurring under large institutional auspices. In Woodward's survey (reference 49) of adult education in the public education system in 1958-59, school systems having adult education programs were asked "whether or not they co-sponsored adult activities with other community institutions or agencies," but the nature of the cooperative relationship between the public school system and the other agency was not pursued. Woodward found that of the 4,840 schools systems which had adult education programs, 13.5 percent reported some type of co-sponsorship; 72.3 percent reported none, and 14.2 percent gave no report. Of the 93 largest school districts having adult education, 57.0 percent were involved in co-sponsorship; for the 132 medium sized districts, the percentage was 43.2, and for the 4,610 smallest districts, 11.8 percent.

Data in the present survey shows the same pattern. By analyzing the data in different ways, as was done in tables 6 and 7 and the text table K on page 40, it can be seen that the larger organizations, with the larger resources, tend to establish cooperative arrangements with other agencies more often and more extensively than do the smaller ones. The data in the Woodward study and the present survey show no heavy pooling of agency and school resources for adult education by smaller governmental or administrative units. For information on government level of sponsorship and state size as influences on the amount of cooperation within a state see table 36 (pp. 119-120) and the accompanying discussion (pp. 119-122).

Kinds of Cooperating Agencies. Working with the variety of cooperating agencies and institutions involved, NCES arrived at five general categories under which the cooperating agencies were then grouped. The categories were determined by studying the names of the agencies and institutions with which the public education systems were cooperating.

Five general groupings used in table 7 were (1) federal agencies such as Federal Youth Center and U.S. air bases; (2) state agencies such as State Employment Service and State Highway Patrol; (3) community organizations and local agencies such as county welfare offices, hospitals, tribal councils, and professional societies; (4) educational agencies such as "School of Drafting" and "Traffic Survival School;" and (5) multiagencies, a term used to describe a situation where several agencies with similar interests combined resources to offer adult education in the public school. In one case "multiagencies" referred to several banks, the chamber of commerce and a skill center; in another case it referred to a group which included a state university, the Bureau of Indian Affairs and the Forestry Service; and for the last illustration, the cooperating agencies were an employment service, state hospital and a school for the deaf. Two coders independently coded the cooperating groups under the five categories; differences for a couple were readily resolved; the irreconcilables were placed in a sixth category, "Other."

Some earlier research has been done on kinds of cooperating agencies and organizations. *A Urban Public School Adult Education Programs* (reference 23) focused on external relationships and services of the public school system. There the data are quite specific on the reciprocal assistance between the public school and such groups as business and industry, labor unions, museums, libraries, luncheon clubs, and parent-teacher associations. The present survey did not attempt the same level of detail.

Additionally, the data derived here do not suggest such a dynamic interaction on the local level. Of the cooperating agencies in this survey, 52.7 percent were either state or federal agencies (from columns 2, 7, and 12 in table 7).

Table 7 contains information on the 226 cooperatively offered adult education programs in operation during either 1968-69 or 1969-70 and reveals various distributions for

Table 6.--Cooperatively offered adult education as percent of all identifiable programs reported for each level of governmental sponsorship, by State or other area: United States, 1968-69

Table 3.--Cooperatively offered adult education as percent of all identifiable programs reported for each level of governmental sponsorship, by State or other area: United States, 1968-69

State or other area	Total		Level of governmental sponsorship					
			Federal		State		Local	
	Number of identifiable programs	Percent cooperatively offered	Number of identifiable programs	Percent cooperatively offered	Number of identifiable programs	Percent cooperatively offered	Number of identifiable programs	Percent cooperatively offered
1	2	3	4	5	6	7	8	9
50 States and D.C.	839	26.0	445	36.0	164	15.2	230	15.2
Alabama	10	70.0	10	70.0	-	-	-	-
Alaska	51	39.2	14	50.0	17	47.1	20	25.0
Arizona	23	39.1	9	66.7	6	16.7	8	25.0
Arkansas	5	20.0	5	20.0	-	-	-	-
California	37	5.4	5	40.0	16	0	16	0
Colorado	22	31.8	21	28.6	-	-	1	100.0
Connecticut	6	16.7	6	16.7	-	-	-	-
Delaware	24	20.8	9	22.2	3	0	12	25.0
District of Columbia	7	0	7	0	-	-	-	-
Florida	20	25.0	17	23.5	2	50.0	1	0
Georgia	8	12.5	8	12.5	-	-	-	-
Hawaii	18	5.6	14	0	4	25.0	-	-
Idaho	3	0	3	0	-	-	-	-
Illinois	10	20.0	6	33.3	4	0	-	-
Indiana	8	25.0	8	25.0	-	-	-	-
Iowa	31	3.2	9	11.1	18	0	4	0
Kansas	26	19.2	7	57.2	19	5.3	-	-
Kentucky	5	0	5	0	-	-	-	-
Louisiana	9	11.1	8	12.5	1	0	-	-
Maine	4	25.0	4	25.0	-	-	-	-
Maryland	32	6.3	22	9.1	-	-	10	0
Massachusetts	15	0	5	0	10	0	-	-
Michigan	5	0	5	0	-	-	-	-
Minnesota	9	55.6	9	55.6	-	-	-	-
Mississippi	4	0	4	0	-	-	-	-
Missouri	27	18.5	9	55.6	-	-	18	0
Montana	16	56.3	9	88.8	-	-	7	14.3
Nebraska	29	24.1	16	37.2	5	20.0	8	0
Nevada	7	71.4	7	71.4	-	-	-	-
New Hampshire	48	6.3	9	33.3	16	0	23	0
New Jersey	4	0	4	0	-	-	-	-
New Mexico	31	32.3	10	70.0	16	18.8	5	0
New York	52	17.3	9	66.7	6	16.7	37	5.4
North Carolina	6	16.7	5	20.0	1	0	-	-
North Dakota	4	0	4	0	-	-	-	-
Ohio	5	20.0	4	0	1	100.0	-	-
Oklahoma	6	16.7	6	16.7	-	-	-	-
Oregon	13	30.8	13	30.8	-	-	-	-
Pennsylvania	37	40.5	7	28.6	9	33.3	21	47.6
Rhode Island	8	37.5	6	33.3	2	50.0	-	-
South Carolina	9	66.7	8	75.0	1	0	-	-
South Dakota	10	70.0	10	70.0	-	-	-	-
Tennessee	4	25.0	4	25.0	-	-	-	-
Texas	37	37.8	13	61.5	-	-	24	25.0
Utah	11	54.6	8	62.5	2	0	1	100.0
Vermont	7	28.6	7	28.6	-	-	-	-
Virginia	13	7.7	4	25.0	2	0	7	0
Washington	30	53.3	21	47.6	2	100.0	7	57.1
West Virginia	13	15.4	13	15.4	-	-	-	-
Wisconsin	16	75.0	15	73.3	1	100.0	-	-
Wyoming	4	50.0	4	50.0	-	-	-	-
Outlying areas	22	13.6	18	11.1	4	25.0	-	-
American Samoa	-	-	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-	-	-
Guam	4	25.0	4	25.0	-	-	-	-
Puerto Rico	11	18.2	7	14.3	4	25.0	-	-
Trust Terr., Pac. Is.	3	0	3	0	-	-	-	-
Virgin Islands	4	0	4	0	-	-	-	-

NOTE.--Entries with grouped data and programs for 1969-70 only were deleted with the result that numbers here are less than in table 1.

Table 7.--Cooperatively offered adult education programs in the different administrative levels of the public education system, according to the descriptive category of cooperating agency, by State or other area: United States 1968-69 and 1969-70

State or other area	Numbers of cooperatively offered[1] adult education programs																																
	Total					Federal agencies[2]					State agencies[3]					Community organizations or local agencies[4]					Education agencies[5]					Multiagencies[6]					Other[7]				
	Total	SEA ([8])	CC ([9])	Both ([10])	Other ([11])	Total	SEA	CC	Both	Other	Total	SEA	CC	Both	Other	Total	SEA	CC	Both	Other	Total	SEA	CC	Both	Other	Total	SEA	CC	Both	Other	Total	SEA	CC	Both	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
50 States and D.C.	226	98	58	58	12	33	14	7	12	--	86	43	15	20	8	44	11	22	9	2	18	3	8	5	2	29	12	5	12	--	16	15	1	--	--
Percent	100.0	43.4	25.7	25.7	5.3	14.6					38.1					19.5					8.0					12.8					7.0				
Federally-sponsored	164	82	30	41	11	23	14	3	6	--	75	39	11	17	8	18	7	7	2	2	13	3	4	5	1	25	10	4	11	--	10	9	1	--	--
Percent	100.0	50.0	18.3	25.0	6.7	14.0					45.7					11.0					7.9					15.2					6.1				
State-sponsored	27	7	9	10	1	7	--	2	5	--	9	4	2	3	--	6	2	3	1	--	2	--	1	--	1	3	1	1	1	--	--	--	--	--	--
Percent	100.0	25.9	33.3	37.0	3.7	25.9					33.3					22.2					7.4					11.1					--				
Locally-sponsored	35	9	19	7	--	3	--	2	1	--	2	--	2	--	--	20	2	12	6	--	3	--	3	--	--	1	1	--	--	--	6	6	--	--	--
Percent	100.0	25.7	54.3	24.1	--	8.6					5.7					57.1					8.6					2.9					17.1				
Alabama	7	7				2	2				2	2									1	1				1	1				1	1			
Alaska	21			21		7			7		6			6		4			4		2			2		2			2					
Arizona	9	3	6			4		4			3	2	1								1		1			1	1							
Arkansas	1	1																								1	1							
California	2	2									2	2														1	1							
Colorado	7			7		1			1		2			2		2			2							2			2					
Connecticut	1	1																			1	1												
Delaware	5	5									2	2				2	2									1	1							
District of Columbia	--																																	
Florida	5	3	2								3	2	1			1		1								1	1							
Georgia	1	1				1	1																											
Hawaii	1	1														1	1																	
Idaho	--																																	
Illinois	2	2																																
Indiana	3	3									3	3																			2	2			
Iowa	1		1																															
Kansas	5			5							3			3		1			1		1			1						1		1		
Kentucky	--																																	
Louisiana	2	2				1	1				1	1																						
Maine	1	1									1	1																						
Maryland	3	2	1								2	1	1			1	1																	
Massachusetts	--																																	
Michigan	--																																	
Minnesota	5	5									3	3														2	2							
Mississippi	--																																	
Missouri	5	5				3	3				2	2																						
Montana	9	8	1			2	2				2	2				1	1				2	1	1			2	2							
Nebraska	8			8		4			4		2			2												2			2					
Nevada	5			5																	1			1		4			4					
New Hampshire	3			3							1			1		1			1							1			1					
New Jersey	--																																	
New Mexico	10	7	3			1		1			5	5				3	2	1								1		1						
New York	9		9								1		1			7		7			1		1											
North Carolina	1		1								1		1																					
North Dakota	--																																	
Ohio	1	1									1	1																						
Oklahoma	1	1									1	1																						
Oregon	4		4								1		1			1		1			2		2											
Pennsylvania	15	1	14								4	1	3			9		9			2		2											
Rhode Island	3	3				1	1				1	1														1	1							
South Carolina	7	7				3	3				3	3				1	1																	
South Dakota	7	7									3	3				2	2									2	2							
Tennessee	1			1							1			1																				
Texas	14	14									1	1				1	1																	
Utah	6			6							3			3		1			1		1			1		1			1		12	12		
Vermont	2	2									2	2																						
Virginia	1	1				1	1																											
Washington	16		16			2		2			6		6			3		3			1		1			4		4						
West Virginia	2	2									2	2																						
Wisconsin	12				12						8				8	2				2														
Wyoming	2			2							2			2							2				2									
Outlying areas	3	3				1	1				1	1				1	1																	
American Samoa	--																																	
Canal Zone	--																																	
Guam	1	1														1	1																	
Puerto Rico	2	2				1	1				1	1																						
Trust Territories	--																																	
Virgin Islands	--																																	

[1] Nonpublic education education agency cooperation with the public education system in the facilitating of organized instruction for adults.
[2] Agencies of the Federal Government.
[3] Agencies of the State Government.
[4] Community organizations and/or local government.
[5] Educational agencies including universities and private schools.
[6] Two o. more of the preceding categories involved.
[7] Category other than the preceding or undeterminable category.
[8] SEA = State education agency.
[9] CC = Community or junior colleges.
[10] Both = Combined SEA and Community colleges or unidentifiable category.
[11] Other = Vocational education in Wisconsin.

them among the states and for the nation. Of the twelve new identifiable programs in 1969-70, six were cooperatively offered, one each for Alaska, Indiana, Louisiana, Maryland, Nebraska, and for South Carolina. (Table 6, focusing on 1968-69, records only 220 cooperatively-offered identifiable programs.)

Within each category in table 7, the tabulations for each state are further broken down into tables which indicate how many programs in that state were conducted in cooperation with a state educational agency (SEA), a community college (CC), both or "other." (Returned OE-2323 forms which were unclear about this had their information on this subject labelled "both.") The same procedure is followed for the summary of the 50 States and District of Columbia except that the totals are further distributed among federal, state, and local sponsorships. Thus, percentages accumulate twice across the table: once for the educational administrative group, such as the community college, and the second time for the cooperating group such as the state agency.

Findings on the Cooperatively-offered Programs. Altogether, there were many more instances of cooperation with a state education agency (SEA) than with a community college (CC). There were 98 instances of cooperation with a state education agency as compared to 58 with a community college (see columns 3 and 4 in table 7). (A proportionally similar distribution between the two categories is assumed in the category, "Both," but further research might investigate this point.) The pattern is accentuated when the cooperation involved the administration of a federally-sponsored program, and reverses to become two instances of cooperation with a community college for every one with a state education agency for locally-sponsored programs. Among the state-sponsored programs the ratio was closer to one to one. (The reader should note from the use of data in tables 4 and 7 we find that the instances of cooperation with a state education agency represent roughly 15 percent of the total number of programs offered by state education agencies, while the instances of cooperation with a community college represent about 29 percent of the total programs offered by public community and junior colleges.)

Analyzing the same data from another perspective, again we find in text table K that more state education agencies offered federally-sponsored programs cooperatively than did the community colleges, and that more community colleges offered locally-sponsored programs cooperatively than did state education agencies.

Table K. Cooperatively-offered programs: 1968-69 and 1969-70

	Total	State Education Agency (SEA)	Community College (CC)	Both SEA & CC	Other
Total	226	98	58	58	12
percent	100.0	100.0	100.0	100.0	100.0
Federal	164	82	30	41	11
percent	72.6	83.7	51.7	70.7	91.7
State	27	7	9	10	1
percent	12.0	7.1	15.5	17.2	8.3
Local	35	9	19	7	--
percent	15.5	9.2	32.8	12.1	--

Examination of the national percentages in table 7 yields a somewhat complementary picture, with a much larger percentage of locally-sponsored cooperative programs being administered by local community organizations or agencies (57.1 percent in column 17 of table 7) than is the case for either of the other levels of sponsorship.

Conversely, a markedly larger proportion (45.7 percent in column 12) of the federally-sponsored programs are found being cooperatively administered by state agencies than by federal or local groups. Of the 33 programs which were offered by the public school system in cooperation with a federal agency, twenty-three (column 7) or 69.7 percent were federally-sponsored and of the 29 (column 27) offered in cooperation with two or more agencies, 25 or 86.2 percent were federally-sponsored. Table 6 and table 7 and text table K on this page show that the overwhelming majority of programs administered by the public school system in cooperation with another agency or institution were federally-sponsored and that locally-sponsored programs tended to be cooperatively administered by a local or community agency or organization. Unlike the state education agencies, the community colleges tended to have more of a local orientation. This is evident in the fact that a larger proportion of the community colleges than the state education agencies were involved in cooperative programs which were being administered at the local level (columns 3 and 4 in table 7).

ENROLLMENTS

The seven tables in this subsection present statistics state by state on various facets of adult education enrollments in the public education system during the years 1968-69 and 1969-70. In the tables, enrollments are analyzed in relation to levels of governmental sponsorship, full-time and part-time attendance and changes between the two years. The data are drawn from the 27 selected federal programs, including four specific U.S. Office of Education-sponsored programs, all community college adult education programs and all programs involving cooperating agencies. Through subtractions

and recombinations of data, it is possible to define adult education enrollments in the public education system in a variety of ways.

By Level of Sponsorship

Table 8 sorts 1968-69 national and state enrollment figures by the level of government sponsorship of the public adult education programs. For the 50 states and the District of Columbia and the outlying areas, the total number of adults enrolled in public school adult education programs was 8,685,576.

The table also reports on the number of students enrolled in "other" federal programs as well as on the number enrolled in the selected 27 programs. Data on the selected 27 federal programs suggest that these 27 are well-attended and deserve the special attention they are given in this survey. Relatively few of the students were enrolled in other federal programs. Indeed, one state alone, Florida, accounted in its returns for more than one-half of all federal enrollments other than for the 27 selected.

Table 8 also reports on how many students were enrolled in programs at each of the three levels of government sponsorship. Fifty-five point six percent were enrolled in federal programs, 21.4 percent in state programs and 23.1 in local programs. Because the state coordinator was instructed to identify any program sponsored by more than one level of government with the level where the program first existed, the data may favor the federally- and state-sponsored programs. Neveretheless, the number of students enrolled in local programs exceeded the number enrolled in state programs by 141,000. Moreover, 21 of the 50 states and D.C. showed larger enrollments in locally-sponsored programs than in state-sponsored programs.

Data comparing total enrollments for the school years 1968-69 and 1969-70 appear in table 9 and the percentage changes are computed. In all states except Indiana there was a larger number of part-time students enrolled than full-time students.[1] This is true in both years and the percent of part-time students to the total number enrolled decreased over the year period.

Level	Enrollment part-time (%)	
	1968-69	1969-70
Federal	82.7	81.9
State	81.9	80.7
Local	96.1	95.8

[1] Part-time is defined as attending for less than 15 hours a week, except in California, where the code defines part-time as less than 10 hours a week.

Since the total number of adult students increased over the same period, these data suggest that more adult students were committing more of their time (by enrolling as full-time students) in 1969 than in 1968. Moreover, a comparison between the national figures and the state averages reveals that the average state is forging ahead more rapidly on this score than is the nation as a whole. Although the data are not striking here, they offer useful baselines for later trend studies.

Changes over time in the number of students enrolled was reported in 1952 by the National Education Association (NEA) in its study of approximately 400 cities of various sizes (reference 23). Comparing the data for the years 1950-51 and 1946-47, NEA found that enrollments in 62.7 percent of the cities had increased. Similarly, 47.4 percent of the cities reported greater enrollments in the school year 1951-52 than in 1950-51. This same pattern is evident in the data from the present survey. Table 9 indicates that 42 of the states, or 82.4 percent, had larger enrollments in 1969-70 than in 1968-69. Again, the average percentage for states appears to move ahead more rapidly than the simple national percentage.

National figures in table 10 (column 9) reveal the percentage increase in adult education enrollments between 1968-69 and 1969-70 to be almost four times greater in programs sponsored by the local public education system than in federal programs. At the same time, for both years, the adult students seemed more likely to enroll full-time in the federally- and state-sponsored programs than in the locally-sponsored programs.

While there is no table summarizing the data, information was gathered by form OE-2323 on the number of teachers in the public school systems who enrolled in inservice training programs given by the public schools. Although the state coordinator was requested to report these figures separately, NCES generally included the inservice training enrollments in the state's total adult education enrollment figure. This was because, in most cases, the inservice enrollment was small in proportion to the total. This was not true in Nebraska where workshops open to teachers and other interested persons accounted for 100 percent of the part-time enrollment in state-sponsored programs and almost 10 percent in the locally-sponsored programs, but the inservice figures were included in the state's total enrollment because "other interested persons" had been included.

However, exceptions were made for Virginia and Tennessee. Because of the size of their inservice programs, enrollment figures on those programs were omitted from the tables in this report. Tennessee requires two weeks inservice training for all its teachers and reported 39,000 part-time enrollees serviced by 500 staff for this purpose which would have accounted for almost two-thirds of the state's adult education enrollment. Virginia registered 53,500 teachers in professional development workshops held in schools at the

Table 8.--Enrollments in adult education in the public education system at each level of governmental sponsorship, by State or other area: United States, 1968-69

Table 4.--Enrollments in adult education in the public education system at each level of governmental sponsorship, by State or other area: United States, 1968-69

State or other area	Total	Federally sponsored			State-sponsored	Locally sponsored
		Total Federal	Selected 1/	Other		
1	2	3	4	5	6	7
50 States and D.C.	8,346,128	4,636,822	4,609,685	27,137	1,784,230	1,925,776
State average 2/	163,650.3	90,918.1	90,386.0	532.1	34,984.9	37,760.3
Alabama	158,601	158,188	158,188	-	1,413	-
Alaska	10,246	7,401	7,401	-	1,075	1,770
Arizona	35,427	33,852	33,852	-	390	1,185
Arkansas	8,672	7,272	7,272	-	1,400	-
California	1,076,678	367,591	367,591	-	560,000	149,087
Colorado	82,916	77,611	77,611	-	-	5,305
Connecticut	99,026	26,142	25,783	359	72,884	-
Delaware	27,914	14,838	14,838	-	10,115	2,961
District of Columbia	22,991	9,101	7,709	1,392	13,890	-
Florida	579,309	312,830	297,930	14,900	188,421	78,058
Georgia	152,666	152,666	151,791	875	-	-
Hawaii	29,016	14,241	14,219	22	14,775	-
Idaho	2,848	2,848	2,848	-	-	-
Illinois	304,173	85,052	85,052	-	126,365	92,756
Indiana	95,572	24,101	24,101	-	71,471	-
Iowa	197,412	61,923	61,923	-	61,243	74,246
Kansas	44,955	32,538	32,538	-	12,417	-
Kentucky	32,754	32,754	32,754	-	-	-
Louisiana	80,714	69,634	69,634	-	11,080	-
Maine	22,634	6,992	6,992	-	15,642	-
Maryland	164,578	53,418	51,144	2,274	33,000	78,160
Massachusetts	92,253	25,734	25,734	-	66,519	-
Michigan	134,907	134,907	134,907	-	-	-
Minnesota	271,420	141,420	139,220	2,200	-	130,000
Mississippi	65,096	65,096	65,096	-	-	-
Missouri	93,797	40,463	40,463	-	-	53,334
Montana	23,330	13,742	13,742	-	-	9,588
Nebraska	112,049	78,193	78,193	-	3,871	29,985
Nevada	12,348	12,348	12,348	-	-	-
New Hampshire	24,740	19,273	19,273	-	494	4,973
New Jersey	457,834	49,023	49,023	-	35,854	372,957
New Mexico	10,440	6,932	6,882	50	2,682	826
New York	1,011,971	464,421	464,261	160	30,237	517,313
North Carolina	177,428	171,680	171,680	-	5,748	-
North Dakota	7,566	7,566	7,566	-	-	-
Ohio	321,963	232,879	232,879	-	420	88,664
Oklahoma	32,878	32,878	32,878	-	-	-
Oregon	158,281	110,390	110,390	-	22,080	25,811
Pennsylvania	275,006	103,712	103,712	-	170,619	675
Rhode Island	30,109	7,855	7,655	-	3,047	19,207
South Carolina	39,045	16,078	15,228	850	20,267	2,700
South Dakota	23,960	15,673	15,673	-	-	8,287
Tennessee	65,369	40,937	40,937	-	562	23,870
Texas	344,242	302,539	302,539	-	-	41,703
Utah	62,225	32,243	32,243	-	29,432	550
Vermont	6,277	6,277	6,277	-	-	-
Virginia	217,369	102,937	102,937	-	31,641	82,791
Washington	315,031	288,573	286,060	2,513	5,176	21,282
West Virginia	74,367	66,635	66,635	-	-	7,732
Wisconsin	653,032	493,032	491,490	1,542	160,000	-
Wyoming	2,393	2,393	2,393	-	-	-
Outlying areas	338,748	56,747	56,747	-	282,001	-
American Samoa	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-
Guam	3,654	721	721	-	2,933	-
Puerto Rico	333,561	54,843	54,843	-	278,718	-
Trust Terr., Pac. Is.	195	195	195	-	-	-
Virgin Islands	1,338	988	988	-	350	-

1/ See table a for identification of 27 selected federally sponsored programs.
2/ States are equally weighted; to obtain State average add up each column and divide by 51.

Table 9.--Changes in adult education enrollment, with numbers of full-time and part-time students, and part-time as a percent of total, for each year, by State or other area: United States, 1968-69 and 1969-70

Table 9.--Changes in adult education enrollment, with numbers of full-time and part-time students, and part-time as a percent of total, for each year, by State or other area: United States, 1968-69 and 1969-70

State or other area	1968-69 enrollments				1969-70 enrollments				Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Part-time as percent of total	Total	Full-time 1/	Part-time 2/	Part-time as percent of total	Number	Percent
1	2	3	4	5	6	7	8	9	10	11
50 States and D.C.	8,346,828	1,200,253	7,146,575	3/ 85.6	9,248,020	1,367,760	7,880,260	3/ 85.2	901,192	3/ 10.8
State average	163,663.3	23,534.4	140,128.9	4/ 85.7	181,333.7	26,818.8	154,514.9	4/ 84.5	17,670.4	4/ 11.1
Alabama	159,601	38,090	121,511	76.1	167,971	42,714	125,257	74.6	8,370	5.2
Alaska	10,246	4,759	5,487	53.6	13,783	5,957	7,826	56.8	3,537	34.5
Arizona	35,427	5,855	29,572	83.5	36,632	10,901	25,731	70.2	1,205	3.4
Arkansas	8,672	837	7,835	90.4	9,562	1,152	8,410	88.0	890	10.3
California 5/	1,076,678	5/ 473,571	5/ 603,107	5/ 56.0	1,205,310	5/ 548,862	5/ 656,448	5/ 54.5	128,632	12.0
Colorado	82,916	23,890	59,026	71.2	83,038	22,453	60,585	73.0	122	.2
Connecticut	99,026	4,934	94,092	95.0	105,009	3,724	101,285	96.5	5,983	6.0
Delaware	27,914	2,441	25,473	91.3	24,519	2,797	21,722	88.6	-3,395	-12.2
District of Columbia	22,991	4,677	18,314	79.7	22,281	4,869	17,412	78.2	-710	-3.1
Florida	579,309	118,663	460,646	79.5	625,329	135,580	489,749	78.3	46,020	7.9
Georgia	152,666	5,760	146,906	96.2	150,350	8,157	142,193	94.6	-2,316	-1.5
Hawaii	29,016	8	29,008	100.0	33,863	8	33,855	100.0	4,847	16.7
Idaho	2,848	-	2,848	100.0	3,695	-	3,695	100.0	847	29.7
Illinois	304,173	12,069	292,104	96.0	363,680	14,089	349,591	96.1	59,507	19.6
Indiana	95,572	54,531	41,041	42.9	87,374	59,801	27,573	31.6	-8,198	-8.6
Iowa	197,412	22,377	175,035	88.7	278,136	27,802	250,334	90.0	80,724	40.9
Kansas	44,955	15,666	29,289	65.2	50,382	16,028	34,354	68.2	5,427	12.1
Kentucky	32,754	-	32,754	100.0	37,783	-	37,783	100.0	5,029	15.4
Louisiana	80,714	31,684	49,030	60.8	85,012	33,132	51,880	61.0	4,298	5.3
Maine	22,634	1,051	21,573	95.3	27,857	900	26,957	96.8	5,223	23.1
Maryland	164,578	7,234	157,344	95.6	180,061	7,922	172,139	95.6	15,483	9.4
Massachusetts	92,253	12,990	79,263	85.9	95,990	14,005	81,985	85.4	3,737	4.1
Michigan	134,907	10,300	124,607	92.4	180,346	12,480	167,866	93.1	45,439	33.7
Minnesota	271,420	2,838	268,582	99.0	272,768	4,922	267,846	98.2	1,348	0.5
Mississippi	65,096	10,126	54,970	84.4	71,445	11,020	60,425	84.6	6,349	9.8
Missouri	93,797	13,325	80,472	85.8	114,539	17,686	96,853	84.6	20,742	22.1
Montana	23,330	8,805	14,525	62.3	22,852	8,016	14,836	64.9	-478	-2.0
Nebraska	112,049	4,200	107,849	96.3	120,386	3,950	116,436	96.7	8,337	7.4
Nevada	12,348	3,310	9,038	73.2	12,642	2,954	9,688	76.6	294	2.4
New Hampshire	24,740	3,866	20,874	84.4	22,306	4,195	18,111	81.2	-2,434	-9.8
New Jersey	457,834	6,584	451,250	98.6	691,285	10,585	680,700	98.5	233,451	51.0
New Mexico	10,440	1,523	8,917	85.4	14,604	2,874	11,730	80.3	4,164	39.9
New York	1,011,971	39,937	972,034	96.1	1,070,037	40,049	1,029,988	96.3	58,066	5.7
North Carolina	177,428	27,969	149,459	84.2	206,501	34,491	172,010	83.3	29,073	16.4
North Dakota	7,566	803	6,763	89.4	7,061	881	6,180	87.5	-505	-6.7
Ohio	321,963	58,247	263,716	81.9	347,015	61,938	285,077	82.2	25,052	7.8
Oklahoma	32,878	2,403	30,475	92.7	36,425	3,275	33,150	91.0	3,547	10.8
Oregon	158,281	32,128	126,153	79.7	173,130	39,247	133,883	77.3	14,849	9.4
Pennsylvania	275,006	4,333	270,673	98.4	288,917	4,107	284,810	98.6	13,911	5.1
Rhode Island	30,109	1,468	28,641	95.1	36,250	1,650	34,600	95.5	6,141	20.4
South Carolina	39,045	200	38,845	99.5	55,222	6,960	48,262	87.4	16,177	41.4
South Dakota	23,960	6,080	17,880	74.6	30,531	10,267	20,264	66.4	6,571	27.4
Tennessee	65,369	3,193	62,176	95.1	69,100	3,500	65,600	94.9	3,731	5.7
Texas	344,242	45,170	329,072	95.6	354,362	14,067	340,295	96.0	10,120	2.9
Utah	62,225	1,289	60,936	97.9	71,207	2,354	68,853	96.7	8,982	14.4
Vermont	6,277	535	5,742	91.5	7,603	729	6,874	90.4	1,326	21.1
Virginia	217,369	3,574	213,795	98.4	220,111	4,105	216,006	98.1	2,742	1.3
Washington	315,031	87,842	227,189	72.1	271,332	89,135	182,197	67.2	-43,699	-13.9
West Virginia	74,367	2,371	71,996	96.8	75,360	3,411	69,949	95.4	-1,007	-1.4
Wisconsin	653,032	5,950	647,082	99.1	716,547	7,259	709,288	99.0	63,515	9.7
Wyoming	2,393	787	1,606	67.1	2,519	800	1,719	68.2	126	5.3
Outlying areas	338,748	7,435	331,313	97.8	424,728	9,219	415,509	97.8	85,980	25.4
American Samoa	-	-	-	-	750	457	293	39.1	750	100.0
Canal Zone	-	-	-	-	-	-	-	-	-	-
Guam	3,654	244	3,410	93.3	3,876	189	3,687	95.1	222	6.1
Puerto Rico	333,561	6,408	327,153	98.1	417,528	7,770	409,758	98.1	83,967	25.2
Trust Terr., Pac. Is.	195	195	-	-	929	165	764	82.2	734	376.4
Virgin Islands	1,338	588	750	56.1	1,645	638	1,007	61.2	307	23.0

1/ Full-time is at least 15 hours of instruction per week.
2/ Part-time is less than 15 hours of instruction per week.
3/ Weighted by populous States; to obtain national percent, figure across. This applies throughout the report.
4/ States are equally weighted; to obtain State average, add up column and divide by 51. This applies throughout the report.
5/ Full-time and part-time numbers and percents reflect approximations, as described in table 6, footnote 3, for locally sponsored community colleges.

Table 10.--Changes in adult education enrollments at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70

Table 6?--Changes in adult education enrollments at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70

State or other area and level of governmental sponsorship of adult education	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
50 States and D.C.								
Federal	1,636,822	801,990	3,834,832	4,916,998	891,467	4,025,531	280,176	6.0
State	1,784,230	323,295	1,460,935	1,956,427	376,748	1,579,679	172,197	9.7
Local	1,925,776	74,968	1,850,808	2,374,595	99,545	2,275,050	448,819	23.3
Alabama								
Federal	158,188	37,867	120,321	166,146	42,542	123,604	7,958	5.0
State	1,413	223	1,190	1,825	172	1,653	412	29.2
Local	-	-	-	-	-	-	-	-
Alaska								
Federal	7,401	3,585	3,816	8,492	4,104	4,388	1,091	14.7
State	1,075	1,046	29	1,700	1,397	303	625	58.1
Local	1,770	128	1,642	3,591	456	3,135	1,821	102.9
Arizona								
Federal	33,852	5,833	28,019	35,471	10,876	24,595	1,619	4.8
State	390	-	390	453	-	453	63	16.2
Local	1,185	22	1,163	708	25	683	-477	-40.3
Arkansas								
Federal	7,272	767	6,505	7,762	1,062	6,700	490	6.7
State	1,400	70	1,330	1,800	90	1,710	400	28.6
Local	-	-	-	-	-	-	-	-
California								
Federal	367,591	177,973	189,618	400,680	189,760	210,920	33,089	9.0
State	560,000	230,000	330,000	611,000	271,000	340,000	51,000	9.1
Local	149,087	3/ 65,598	3/ 83,489	193,630	3/ 88,102	3/ 105,528	44,543	29.9
Colorado								
Federal	77,611	22,590	55,021	77,338	21,053	56,285	-273	-.4
State	-	-	-	-	-	-	-	-
Local	5,305	1,300	4,005	5,700	1,400	4,300	395	7.5
Connecticut								
Federal	26,142	4,934	21,208	27,134	3,724	23,410	992	3.8
State	72,884	-	72,884	77,875	-	77,875	4,991	6.9
Local	-	-	-	-	-	-	-	-
Delaware								
Federal	14,838	1,292	13,546	13,790	1,475	12,315	-1,048	-7.1
State	10,115	1,149	8,966	8,450	1,322	7,128	-1,665	-16.5
Local	2,961	-	2,961	2,279	-	2,279	-682	-23.0
District of Columbia								
Federal	9,101	3,721	5,380	9,580	3,819	5,761	479	5.3
State	13,890	956	12,934	12,701	1,050	11,651	-1,189	-8.6
Local	-	-	-	-	-	-	-	-
Florida								
Federal	312,830	99,642	213,188	333,240	114,630	218,610	20,410	6.5
State	188,421	19,021	169,400	207,060	20,950	186,110	18,639	9.9
Local	78,058	-	78,058	85,029	-	85,029	6,971	8.9
Georgia								
Federal	152,666	5,760	146,906	150,350	8,157	142,193	-2,316	-1.5
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Hawaii								
Federal	14,241	8	14,233	16,248	8	16,240	2,007	14.1
State	14,775	-	14,775	17,615	-	17,615	2,840	19.2
Local	-	-	-	-	-	-	-	-
Idaho								
Federal	2,848	-	2,848	3,695	-	3,695	847	29.7
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Illinois								
Federal	85,052	12,069	72,983	111,679	12,901	98,778	26,627	31.3
State	126,365	-	126,365	132,678	1,188	131,490	6,313	5.0
Local	92,756	-	92,756	119,323	-	119,323	26,567	28.6

Table 10.--Changes in adult education enrollments at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--continued

Table 6.--Changes in adult education enrollments at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Indiana								
Federal	24,101	11,450	12,651	18,946	9,491	9,455	-5,155	-21.4
State	71,471	43,081	28,390	68,428	50,310	18,118	-3,043	-4.3
Local	-	-	-	-	-	-	-	-
Iowa								
Federal	61,923	22,069	39,854	57,189	27,382	29,807	-4,734	-8.0
State	61,243	-	61,243	62,588	-	62,588	1,345	2.2
Local	74,246	308	73,938	158,359	420	157,939	84,113	113.3
Kansas								
Federal	32,538	15,137	17,401	33,188	15,531	17,657	650	2.0
State	12,417	529	11,888	17,194	497	16,697	4,777	38.5
Local	-	-	-	-	-	-	-	-
Kentucky								
Federal	32,754	-	32,754	37,783	-	37,783	5,029	15.4
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Louisiana								
Federal	69,634	20,604	49,030	73,812	21,932	51,880	4,178	6.0
State	11,080	11,080	-	11,200	11,200	-	120	1.1
Local	-	-	-	-	-	-	-	-
Maine								
Federal	6,992	1,061	5,931	7,857	900	6,957	865	12.4
State	15,642	-	15,642	20,000	-	20,000	4,358	27.9
Local	-	-	-	-	-	-	-	-
Maryland								
Federal	53,418	6,652	46,766	55,078	6,976	48,102	1,660	3.1
State	33,000	-	33,000	38,517	-	38,517	5,517	16.7
Local	78,160	582	77,578	86,466	946	85,520	8,306	10.6
Massachusetts								
Federal	25,734	12,790	12,944	27,255	13,655	13,600	1,521	5.9
State	66,519	200	66,319	68,735	350	68,385	2,216	3.3
Local	-	-	-	-	-	-	-	-
Michigan								
Federal	134,907	10,300	124,607	180,346	12,480	167,866	45,439	33.7
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Minnesota								
Federal	141,420	2,838	138,582	142,768	4,922	137,846	1,348	1.0
State	-	-	-	-	-	-	-	-
Local	130,000	-	130,000	130,000	-	130,000	0	0
Mississippi								
Federal	65,096	10,126	54,970	71,445	11,020	60,425	6,349	9.8
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Missouri								
Federal	40,463	9,756	30,707	57,708	13,225	44,483	17,245	42.6
State	-	-	-	-	-	-	-	-
Local	53,334	3,569	49,765	56,831	4,461	52,370	3,497	6.6
Montana								
Federal	13,742	8,577	5,165	14,747	7,724	7,023	1,005	7.3
State	-	-	-	-	-	-	-	-
Local	9,588	228	9,360	8,105	292	7,813	-1,483	-15.5
Nebraska								
Federal	78,193	3,929	74,264	79,801	3,700	76,101	1,608	2.1
State	3,871	271	3,600	6,126	250	5,876	2,255	58.3
Local	29,985	-	29,985	34,459	-	34,459	4,474	14.9
Nevada								
Federal	12,348	3,310	9,038	12,642	2,954	9,688	294	2.4
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-

Table 10.--Changes in adult education enrollments at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 6.--Changes in adult education enrollments at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
New Hampshire								
Federal	19,273	3,866	15,407	15,734	4,195	11,539	-3,539	-18.4
State	494	-	494	1,517	-	1,517	1,023	207.1
Local	4,973	-	4,973	5,055	-	5,055	82	1.6
New Jersey								
Federal	49,023	6,131	42,892	52,228	10,166	42,062	3,205	6.5
State	35,854	-	35,854	50,102	-	50,102	14,248	39.7
Local	372,957	453	372,504	588,955	419	588,536	215,998	57.9
New Mexico								
Federal	6,932	371	6,561	8,896	1,078	7,818	1,964	28.3
State	2,682	1,152	1,530	4,788	1,796	2,992	2,106	78.5
Local	826	-	826	920	-	920	94	11.4
New York								
Federal	464,421	26,370	438,051	484,943	25,948	458,995	20,522	4.4
State	30,237	13,567	16,670	32,103	14,101	18,002	1,866	6.2
Local	517,313	-	517,313	552,991	-	552,991	35,678	6.9
North Carolina								
Federal	171,680	27,519	144,161	198,852	33,941	164,911	27,172	15.8
State	5,748	450	5,298	7,649	550	7,099	1,901	33.1
Local	-	-	-	-	-	-	-	-
North Dakota								
Federal	7,566	803	6,763	7,036	856	6,180	-530	-7.0
State	-	-	-	25	25	-	25	100.0
Local	-	-	-	-	-	-	-	-
Ohio								
Federal	232,879	57,827	175,052	255,115	61,538	193,577	22,236	9.5
State	420	420	-	400	400	-	-20	-4.8
Local	88,664	-	88,664	91,500	-	91,500	2,836	3.2
Oklahoma								
Federal	32,878	2,403	30,475	36,425	3,275	33,150	3,547	10.8
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Oregon								
Federal	110,390	31,148	79,242	121,480	38,197	83,283	11,090	10.1
State	22,080	80	22,000	25,700	100	25,600	3,620	16.4
Local	25,811	900	24,911	25,950	950	25,000	139	.5
Pennsylvania								
Federal	103,712	4,333	99,379	107,345	4,107	103,238	3,633	3.5
State	170,619	-	107,619	179,782	-	179,782	9,163	5.4
Local	675	-	675	1,790	-	1,790	1,115	165.2
Rhode Island								
Federal	7,855	1,468	6,387	8,105	1,650	6,455	250	3.2
State	3,047	-	3,047	3,145	-	3,145	98	3.2
Local	19,207	-	19,207	25,000	-	25,000	5,793	30.2
South Carolina								
Federal	16,078	200	15,878	22,309	6,960	15,349	6,231	38.8
State	20,267	-	20,267	29,370	-	29,370	9,103	44.9
Local	2,700	-	2,700	3,543	-	3,543	843	31.2
South Dakota								
Federal	15,673	6,005	9,668	19,821	10,161	9,660	4,148	26.5
State	-	-	-	-	-	-	-	-
Local	8,287	75	8,212	10,710	106	10,604	2,423	29.2
Tennessee								
Federal	40,937	3,193	37,744	44,300	3,500	40,800	3,363	8.2
State	562	-	562	800	-	800	238	42.4
Local	23,870	-	23,870	24,000	-	24,000	130	.6
Texas								
Federal	302,539	13,789	288,750	311,468	12,539	298,929	8,929	3.0
State	-	-	-	-	-	-	-	-
Local	41,705	1,381	40,322	42,894	1,528	41,366	1,191	2.9

Table 10.--Changes in adult education enrollments at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 6.--Changes in adult education enrollments at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Utah								
Federal	32,243	1,289	30,954	29,521	2,354	27,167	-2,722	-8.4
State	29,432	-	29,432	40,686	-	40,686	11,254	38.2
Local	550	-	550	1,000	-	1,000	450	81.8
Vermont								
Federal	6,277	535	5,742	7,603	729	6,874	1,326	21.1
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Virginia								
Federal	102,937	3,574	99,363	102,111	4,105	98,006	-826	-.8
State	31,641	-	31,641	33,000	-	33,000	1,359	4.3
Local	82,791	-	82,791	85,000	-	85,000	2,209	2.7
Washington								
Federal	288,573	87,418	201,155	241,707	88,695	153,012	-46,866	-16.2
State	5,176	-	5,176	6,415	-	6,415	1,239	23.9
Local	21,282	424	20,858	23,210	440	22,770	1,928	9.1
West Virginia								
Federal	66,635	2,371	64,264	65,763	3,411	62,352	-872	-1.3
State	-	-	-	-	-	-	-	-
Local	7,732	-	7,732	7,597	-	7,597	-135	-1.7
Wisconsin								
Federal	493,032	5,950	487,082	541,547	7,259	534,288	48,515	9.8
State	160,000	-	160,000	175,000	-	175,000	15,000	9.4
Local	-	-	-	-	-	-	-	-
Wyoming								
Federal	2,393	787	1,606	2,519	800	1,719	126	5.3
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Outlying areas								
Federal	56,747	5,601	51,146	67,937	7,162	60,775	11,190	19.7
State	282,001	1,834	280,167	356,791	2,057	354,734	74,790	26.5
Local	-	-	-	-	-	-	-	-
American Samoa								
Federal	-	-	-	332	162	170	332	100.0
State	-	-	-	418	295	123	418	100.0
Local	-	-	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-	-	-
Guam								
Federal	721	244	477	552	189	363	-169	-23.4
State	2,933	-	2,933	3,324	-	3,324	391	13.3
Local	-	-	-	-	-	-	-	-
Puerto Rico								
Federal	54,843	4,574	50,269	65,450	6,008	59,442	10,607	19.3
State	276,718	1,834	276,884	352,078	1,762	350,316	73,360	26.3
Local	-	-	-	-	-	-	-	-
Trust Terr., Pac. Is.								
Federal	195	195	-	358	165	193	163	83.6
State	-	-	-	571	-	571	571	100.0
Local	-	-	-	-	-	-	-	-
Virgin Islands								
Federal	988	588	400	1,245	638	607	257	26.0
State	350	-	350	400	-	400	50	14.3
Local	-	-	-	-	-	-	-	-

1/ Full-time is at least 15 hours of instruction per week.
2/ Part-time is less than 15 hours of instruction per week.
3/ California community college returns did not reflect full-time and part-time allocations for either enrollment or instructional staff for both years. The California data, exclusive of the community college data, were used as a basis for prorating the total figures provided by the community colleges in order to approximate the full-time and part-time figures for locally sponsored community college adult education.

district level in 1968-69. Inclusion of these figures would have increased Virginia's total regular part-time adult education enrollment by about 25 percent.

Most of the states cooperated in giving inservice data. However some states indicated they had inservice teacher workshops but did not provide any statistics about them. Five states–Alaska, Connecticut, Maryland, Montana, and Pennsylvania–included statistics for special purpose teacher education but the numbers of enrollees were insignificant compared to their total numbers of adult students. Although included in this survey, an argument could be made that inservice statistics should not be included since they represent administrative practices rather than services provided to the public.

The 27 Selected Federal Programs

Each state coordinator was required to report each of the 27 federal programs separately because they were listed separately on the form, OE-2323. Consequently data in table 11, which presents the figures by state, are easily compared. Some interesting trends emerge. For example, the percentage increase in enrollments in the 27 programs from 1969 to 1970 was less for the nation as a whole than for the average state. One possible explanation for this is that there was less of an increase in enrollments in states with larger adult education enrollments and larger increases in the states with the smaller enrollments.

Just as the states with larger adult education enrollments may have a disproportionate influence on the national figures, so may the larger programs. For these reasons, how the data are analyzed can shape their meaning.

The following four analyses illustrate the different results which can be obtained by approaching the data from different perspectives. The different bases used were: for the nation as a whole; the average state; the average program; and the average program in the average state.

The figures in table 11, column 9, which describe the nation as a whole, show that from 1968-69 to 1969-70 there was a percentage increase of 5.9 in the size of the total adult education enrollments. However, using the figures for the average state for both years, we find the percentage increase is 6.7, which is 1.13 times the national figure.

The third approach computes the average percentage increase in enrollments in the 27 federal programs over the two year period. This figure is 16.5 percent or 2.86 greater than the increase for the nation.

There is a problem in that the enrollment figures in table 11 describe enrollments in all of the 414 federally-sponsored identifiable programs in operation in either 1968-69 *or* 1969-70, while these percentages are based on information on only the 375 programs which were in operation within states during both years. Nevertheless, these comparative statistics strongly suggest that smaller units of analysis have been expanding at a much faster rate than the larger ones.

The fourth approach examines enrollment increase within each of the states. The average percentage increase in the average program used above in the average state is 19 percent, which is 3.2 times the percentage increase for the nation.

Not surprisingly, the national figures on enrollments show the greatest amount of stability over time, even though they may mask significant differences between states or programs. Such differences can be much greater than those uncovered here.

The Four U.S. Office of Education Programs

The statistics given so far have been based, almost without exception, on data from two or more programs. Such statistics can mask the distinguishing characteristics of individual programs. Such characteristics may be more apparent in the states with only a few programs. National summary figures which are based on a large number of programs, balance out the differences to yield a more stable representation of the total.

Information in table 12 illustrates what variations there can be in particular programs. The table presents data on four programs. Their total enrollments represent 39 percent of the 8,346,828 enrollments in 1968-69. The four programs selected for this analysis from the list of 27 were the Adult Basic Education program (ABE), the Adult Vocational Education Program (AVE), the Civil Defense Adult Education program (CDAE) and the Manpower Development and Training program (MDT). Each of these programs had its own sponsoring office within the U.S. Office of Education, while almost all of the states listed these four programs as being in operation in their public school systems.

The section on "Testing the Data's Quality" earlier in this report (page 21) describes the initial processing of data for these four programs and the discussions held by National Center for Education Statistics (NCES) staff with the officer of each program in an attempt to resolve apparent discrepancies between NCES data and Office of Education data. These interactions reinforced NCES' judgment that gathering statistics from the states themselves was preferable to lifting them from other sources, particularly when other sources were unlikely to identify the portion of the program data which occurred in the public education system. Of course, some errors are bound to occur either way.

Examination of the percentage of part-time students to the total enrollment in each of the four programs demonstrates the wide differences possible among programs. These differences are undoubtedly explained in terms of differences in their methods and objectives.

Table 11.–Changes in enrollments for the 27 selected[1] federally sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70

Table 7.--Changes in enrollments for the 27 selected[1/] federally sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70

State or other area	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 2/	Part-time 3/	Total	Full-time 2/	Part-time 3/	Number	Percent
1	2	3	4	5	6	7	8	9
50 States and D.C.	4,609,685	791,231	3,818,454	4,882,411	872,848	4,009,563	272,726	5.9
State average	90,386.0	15,514.3	74,871.7	95,733.6	17,114.7	78,619.0	5,347.6	6.7
Alabama	158,188	37,867	120,321	166,146	42,542	123,604	7,958	5.0
Alaska	7,401	3,585	3,816	8,225	3,837	4,388	824	11.1
Arizona	33,852	5,833	28,019	35,471	10,876	24,595	1,619	4.8
Arkansas	7,272	767	6,505	7,762	1,062	6,700	490	6.7
California	367,591	177,973	189,618	400,680	189,760	210,920	33,089	9.0
Colorado	77,611	22,590	55,021	77,338	21,053	56,285	-273	-.4
Connecticut	25,783	4,934	20,849	26,481	3,724	22,757	698	2.7
Delaware	14,838	1,292	13,546	13,790	1,475	12,315	-1,048	-7.1
District of Columbia	7,709	2,793	4,916	8,024	2,781	5,243	315	4.1
Florida	297,930	91,389	206,541	318,168	106,080	212,088	20,238	6.8
Georgia	151,791	5,760	146,031	149,652	8,157	141,495	-2,139	-1.4
Hawaii	14,219	-	14,219	16,209	-	16,209	1,990	14.0
Idaho	2,848	-	2,848	3,695	-	3,695	847	29.7
Illinois	85,052	12,069	72,983	111,679	12,901	98,778	26,627	31.3
Indiana	24,101	11,450	12,651	18,946	9,491	9,455	-5,155	-21.4
Iowa	61,923	22,069	39,854	56,969	27,182	29,787	-4,954	-8.0
Kansas	32,538	15,137	17,401	33,188	15,531	17,657	650	2.0
Kentucky	32,754	-	32,754	37,783	-	37,783	5,029	15.4
Louisiana	69,634	20,604	49,030	73,607	21,727	51,880	3,973	5.9
Maine	6,992	1,061	5,931	7,857	900	6,957	865	12.4
Maryland	51,144	6,110	45,034	53,074	6,507	46,567	1,930	3.8
Massachusetts	25,734	12,790	12,944	27,255	13,655	13,660	1,521	5.9
Michigan	134,907	10,300	124,607	180,346	12,480	167,866	45,439	33.7
Minnesota	139,220	2,838	136,382	140,568	4,922	135,646	1,348	1.0
Mississippi	65,096	10,126	54,970	71,445	11,020	60,425	6,349	9.8
Missouri	40,463	9,756	30,707	57,708	13,225	44,483	17,245	42.6
Montana	13,742	8,577	5,165	14,535	7,512	7,023	793	5.8
Nebraska	78,193	3,929	74,264	79,651	3,700	75,951	1,458	1.9
Nevada	12,348	3,310	9,038	12,642	2,954	9,688	294	2.4
New Hampshire	19,273	3,866	15,407	15,734	4,195	11,539	-3,539	-18.4
New Jersey	49,023	6,131	42,892	52,228	10,166	42,062	3,205	6.5
New Mexico	6,882	321	6,561	8,896	1,078	7,818	2,014	29.3
New York	464,261	26,246	438,015	484,770	25,814	458,956	20,509	4.4
North Carolina	171,680	27,519	144,161	198,852	33,941	164,911	27,172	15.8
North Dakota	7,566	803	6,763	7,036	856	6,180	-530	-7.0
Ohio	232,879	57,827	175,052	255,115	61,538	193,577	22,236	9.6
Oklahoma	32,878	2,403	30,475	36,425	3,275	33,150	3,547	10.8
Oregon	110,390	31,148	79,242	121,480	38,197	83,283	11,090	10.1
Pennsylvania	103,712	4,333	99,379	107,294	4,081	103,213	3,582	3.5
Rhode Island	7,855	1,468	6,387	8,105	1,650	6,455	250	3.2
South Carolina	15,228	-	15,228	14,763	89	14,674	-465	-3.1
South Dakota	15,673	6,005	9,668	19,821	10,161	9,660	4,148	26.5
Tennessee	40,937	3,193	37,744	44,300	3,500	40,800	3,363	8.2
Texas	302,539	13,789	288,750	311,468	12,539	298,929	8,929	3.0
Utah	32,243	1,289	30,954	29,521	2,354	27,167	-2,722	-8.4
Vermont	6,277	535	5,742	7,603	729	6,874	1,326	21.1
Virginia	102,937	3,574	99,363	102,111	4,105	98,006	-826	-.8
Washington	286,060	86,764	199,296	239,756	88,056	151,700	-46,304	-16.2
West Virginia	66,635	2,371	64,264	65,763	3,411	62,352	-872	-1.3
Wisconsin	491,490	5,950	485,540	539,957	7,259	532,698	48,467	9.9
Wyoming	2,393	787	1,606	2,519	800	1,719	126	5.3
Outlying areas	56,747	5,601	51,146	67,937	7,162	60,775	11,190	19.7
American Samoa	-	-	-	332	162	170	332	100.0
Canal Zone	-	-	-	-	-	-	-	-
Guam	721	244	477	552	189	363	-169	-23.4
Puerto Rico	54,843	4,574	50,269	65,450	6,008	59,442	10,607	19.3
Trust Terr., Pac. Is.	195	195	-	358	165	193	163	83.6
Virgin Islands	988	588	400	1,245	638	607	257	26.0

1/ See table a for identification of the 27 selected federally sponsored adult education programs.
2/ Full-time is at least 15 hours of instruction per week.
3/ Part-time is less than 15 hours of instruction per week.

Table 12.--Changes in enrollment for the four OE-sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70

Table 8.--Changes in enrollment for the four OE-sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70

State or other area and four OE-sponsored adult education programs	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
50 States and District of Columbia								
Adult Basic Education (ABE)	462,332	85,433	376,889	502,825	96,380	406,445	40,503	8.8
Adult Vocational Education (AVE)	2,508,580	405,141	2,103,439	2,679,169	452,614	2,226,555	170,589	6.8
Civil Defense Adult Education (CDAE)	153,670	8,561	145,109	129,910	8,113	121,797	-23,760	-15.5
Manpower Development and Training (MDT)	131,326	120,136	11,190	135,732	120,852	14,880	4,406	3.4
Alabama								
ABE	11,221	-	11,221	11,250	-	11,250	29	.3
AVE	34,345	-	34,345	38,129	-	38,129	3,784	11.0
CDAE	1,529	-	1,529	1,310	655	655	-219	-14.3
MDT	1,803	1,803	-	1,440	1,440	-	-363	-20.1
Alaska								
ABE	1,064	777	287	1,270	1,119	151	206	19.4
AVE	1,064	939	125	1,175	714	461	111	10.4
CDAE	893	893	-	540	540	-	-353	-39.5
MDT	812	700	112	1,028	728	300	216	26.6
Arizona								
ABE	3,431	1,058	2,373	4,575	1,320	3,255	1,144	33.3
AVE	25,792	468	25,324	25,901	4,816	21,085	109	.4
CDAE	-	-	-	-	-	-	-	-
MDT	2,762	2,687	75	3,000	2,925	75	238	8.6
Arkansas								
ABE	6,797	572	6,225	7,164	764	6,400	367	5.4
AVE	-	-	-	-	-	-	-	-
CDAE	-	-	-	-	-	-	-	-
MDT	-	-	-	-	-	-	-	-
California								
ABE	50,378	50,378	-	55,000	55,000	-	4,622	9.2
AVE	290,873	109,115	181,758	320,000	120,000	200,000	29,127	10.0
CDAE	3,800	-	3,800	4,120	-	4,120	320	8.4
MDT	15,540	15,480	60	10,960	10,960	-	-4,580	-29.5
Colorado								
ABE	3,035	2,425	610	3,400	2,720	680	365	12.0
AVE	47,368	-	47,368	48,500	-	48,500	1,132	2.4
CDAE	1,015	-	1,015	861	-	861	-154	-15.2
MDT	1,150	1,100	50	2,500	1,200	1,300	1,350	117.4
Connecticut								
ABE	9,497	-	9,497	10,000	-	10,000	503	5.3
AVE	11,722	803	10,919	13,192	724	12,468	1,470	12.5
CDAE	433	-	433	289	-	289	-144	-33.3
MDT	3,000	3,000	-	1,800	1,800	-	-1,200	-40.0
Delaware								
ABE	1,044	343	701	1,258	354	904	214	20.5
AVE	11,195	175	11,020	10,740	96	10,644	-455	-4.1
CDAE	1,480	-	1,480	407	-	407	-1,073	-72.5
MDT	401	401	-	413	413	-	12	3.0
District of Columbia								
ABE	2,832	-	2,832	3,476	-	3,476	644	22.7
AVE	1,534	-	1,534	1,234	-	1,234	-300	-19.6
CDAE	138	-	138	108	-	108	-30	-21.7
MDT	848	848	-	1,087	1,087	-	239	28.2
Florida								
ABE	27,117	2,612	24,505	30,000	3,000	27,000	2,883	10.6
AVE	246,754	83,717	163,037	262,634	94,988	167,646	15,880	6.4
CDAE	6,331	-	6,331	5,000	-	5,000	-1,331	-21.0
MDT	2,340	2,340	-	2,677	2,657	20	337	14.4
Georgia								
ABE	17,825	-	17,825	19,317	-	19,317	1,492	8.4
AVE	124,636	-	124,636	118,728	-	118,728	-5,908	-4.7
CDAE	5,573	3,694	1,879	7,064	5,414	1,650	1,491	26.8
MDT	3,580	1,889	1,691	3,700	1,900	1,800	120	3.4
Hawaii								
ABE	8,672	-	8,672	9,539	-	9,539	867	10.0
AVE	2,207	-	2,207	2,428	-	2,428	221	10.0
CDAE	567	-	567	624	-	624	57	10.1
MDT	242	-	242	411	-	411	169	69.8
Idaho								
ABE	1,794	-	1,794	1,800	-	1,800	6	.3
AVE	-	-	-	-	-	-	-	-
CDAE	134	-	134	972	-	972	838	625.4
MDT	-	-	-	-	-	-	-	-
Illinois								
ABE	25,314	4,390	20,924	25,719	4,560	21,159	405	1.6
AVE	39,895	-	39,895	49,218	-	49,218	9,323	23.4
CDAE	1,907	-	1,907	1,907	-	1,907	0	0
MDT	7,070	6,920	150	7,720	7,620	100	650	9.2

Table 12.--Changes in enrollment for the four OE-sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 8.--Changes in enrollment for the four OE-sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and four OE-sponsored adult education programs	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Indiana								
ABE	5,616	860	4,756	6,000	1,000	5,000	384	6.8
AVE	6,256	3,924	2,332	4,027	2,000	2,027	-2,229	-35.6
CDAE	4,294	-	4,294	1,005	-	1,005	-3,289	-76.6
MDT	3,075	3,075	-	2,268	2,268	-	-807	-26.2
Iowa								
ABE	7,648	-	7,648	5,560	-	5,560	-2,088	-27.3
AVE	22,873	8,390	14,483	28,394	10,148	18,246	5,521	24.1
CDAE	8,412	-	8,412	2,061	-	2,061	-6,351	-75.5
MDT	1,479	1,081	398	1,720	1,370	350	241	16.3
Kansas								
ABE	2,340	-	2,340	2,640	-	2,640	300	12.8
AVE	12,360	12,360	-	12,360	12,360	-	0	0
CDAE	766	-	766	230	-	230	-536	-70.0
MDT	1,639	1,399	240	1,863	1,661	202	224	13.7
Kentucky								
ABE	11,446	-	11,446	12,369	-	12,369	923	8.1
AVE	9,869	-	9,869	12,842	-	12,842	2,973	30.1
CDAE	-	-	-	-	-	-	-	-
MDT	6,189	-	6,189	7,172	-	7,172	983	15.9
Louisiana								
ABE	13,438	-	13,438	16,200	1,200	15,000	2,762	20.6
AVE	49,478	16,282	33,196	51,179	16,889	34,290	1,701	3.4
CDAE	1,674	1,674	-	504	504	-	-1,170	-69.9
MDT	2,451	2,255	196	2,450	2,265	185	-1	3/
Maine								
ABE	1,431	-	1,431	1,600	-	1,600	169	11.8
AVE	3,200	-	3,200	4,500	-	4,500	1,300	40.6
CDAE	1,300	-	1,300	857	-	857	-443	-34.1
MDT	1,061	1,061	-	900	900	-	-161	-15.2
Maryland								
ABE	5,595	779	4,816	6,883	1,131	5,752	1,288	23.0
AVE	39,085	197	38,888	39,802	280	39,522	717	1.8
CDAE	-	-	-	17	-	17	17	100.0
MDT	5,252	4,801	451	4,719	4,433	286	-533	-10.2
Massachusetts								
ABE	7,034	90	6,944	7,200	100	7,100	166	2.4
AVE	8,500	8,500	-	9,000	9,000	-	500	5.9
CDAE	6,200	200	6,000	6,800	300	6,500	600	9.7
MDT	3,900	3,900	-	4,100	4,100	-	200	5.1
Michigan								
ABE	13,211	-	13,211	15,409	-	15,409	2,198	16.6
AVE	111,396	-	111,396	145,532	-	145,532	34,136	30.6
CDAE	-	-	-	6,905	-	6,905	6,905	100.0
MDT	3,794	3,794	-	4,800	4,780	20	1,006	26.5
Minnesota								
ABE	2,507	478	2,029	2,762	644	2,118	255	10.2
AVE	98,382	-	98,382	102,197	-	102,197	3,815	3.2
CDAE	11,470	-	11,470	7,061	-	7,061	-4,409	-38.4
MDT	2,390	2,360	30	3,183	3,113	70	793	33.2
Mississippi								
ABE	9,354	-	9,354	9,372	105	9,267	18	0.2
AVE	41,891	6,791	35,100	45,500	7,500	38,000	3,609	8.6
CDAE	10,516	-	10,516	13,158	-	13,158	2,642	25.1
MDT	3,335	3,335	-	3,415	3,415	-	80	2.4
Missouri								
ABE	6,841	-	6,841	9,133	-	9,133	2,292	33.5
AVE	29,663	5,933	23,730	41,089	8,218	32,871	11,426	38.5
CDAE	131	-	131	28	-	28	-103	-78.6
MDT	3,018	3,018	-	3,336	3,336	-	318	10.5
Montana								
ABE	744	166	578	721	311	410	-23	-3.1
AVE	1,950	-	1,950	2,144	-	2,144	194	10.0
CDAE	2,624	-	2,624	4,444	-	4,444	1,820	69.4
MDT	571	571	-	675	675	-	104	18.2
Nebraska								
ABE	1,740	-	1,740	2,100	-	2,100	360	20.7
AVE	19,752	1,025	18,727	19,025	1,025	18,000	-727	-3.7
CDAE	1,540	-	1,540	1,500	-	1,500	-40	-2.6
MDT	1,046	1,009	37	1,100	600	500	54	5.2
Nevada								
ABE	1,390	-	1,390	1,550	-	1,550	160	11.5
AVE	8,908	2,000	6,908	9,500	2,500	7,000	592	6.7
CDAE	700	-	700	893	-	893	193	27.6
MDT	1,310	1,310	-	454	454	-	-856	-65.3

Table 12.--Changes in enrollment for the four OE-sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70—Continued

Table 8.--Changes in enrollment for the four OE-sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and four OE-sponsored adult education programs	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
New Hampshire								
ABE	1,024	-	1,024	1,250	53	1,197	226	22.1
AVE	1,633	-	1,633	2,274	-	2,274	641	39.3
CDAE	385	-	385	787	-	787	402	104.4
MDT	711	678	33	861	519	342	150	21.1
New Jersey								
ABE	9,947	-	9,947	11,100	-	11,100	1,153	11.6
AVE	26,660	-	26,660	27,839	-	27,839	1,179	4.4
CDAE	6,285	-	6,285	2,623	-	2,623	-3,662	-58.3
MDT	6,131	6,131	-	10,366	10,166	200	4,235	69.1
New Mexico								
ABE	3,294	-	3,294	4,248	-	4,248	954	29.0
AVE	3,182	60	3,122	3,695	175	3,520	513	16.1
CDAE	-	-	-	-	-	-	-	-
MDT	-	-	-	297	297	-	297	100.0
New York								
ABE	18,325	18,325	-	19,280	19,280	-	955	5.2
AVE	27,672	31	27,641	28,636	33	28,603	964	3.5
CDAE	326	-	326	301	-	301	-25	-7.7
MDT	7,890	7,890	-	6,501	6,501	-	-1,389	-17.6
North Carolina								
ABE	22,542	-	22,542	26,398	-	26,398	3,856	17.1
AVE	141,796	25,603	116,193	167,717	32,138	135,579	25,921	18.3
CDAE	3,601	-	3,601	1,041	-	1,041	-2,560	-71.1
MDT	1,916	1,916	-	1,803	1,803	-	-113	-5.9
North Dakota								
ABE	691	-	691	874	-	874	183	26.5
AVE	4,786	403	4,383	4,365	480	3,885	-421	-8.8
CDAE	1,689	-	1,689	1,421	-	1,421	-268	-15.9
MDT	400	400	-	376	376	-	-24	-6.0
Ohio								
ABE	12,739	-	12,739	15,000	-	15,000	2,261	17.7
AVE	170,614	8,376	162,238	187,089	8,627	178,462	16,475	9.7
CDAE	-	-	-	-	-	-	-	-
MDT	3,740	3,665	75	4,026	3,911	115	286	7.6
Oklahoma								
ABE	8,147	1,000	7,147	9,100	1,100	8,000	953	11.7
AVE	22,000	-	22,000	23,800	-	23,800	1,800	8.2
CDAE	258	-	258	270	-	270	12	4.7
MDT	1,363	1,363	-	2,175	2,175	-	812	59.6
ABE	2,397	105	2,292	3,009	150	2,859	612	25.5
AVE	37,706	29,258	8,448	46,284	35,914	10,370	8,578	22.7
CDAE	3,092	-	3,092	1,302	-	1,302	-1,790	-57.9
MDT	1,435	1,375	60	1,599	1,529	70	164	11.4
Pennsylvania								
ABE	14,464	-	14,464	13,980	-	13,980	-484	-3.3
AVE	84,590	-	84,590	88,819	-	88,819	4,229	4.0
CDAE	-	-	-	-	-	-	-	-
MDT	4,573	4,333	240	4,273	4,081	192	-300	-6.6
Rhode Island								
ABE	1,798	-	1,798	1,980	-	1,980	182	10.1
AVE	4,006	323	3,683	3,951	515	3,436	-55	-1.4
CDAE	765	-	765	710	-	710	-55	-7.2
MDT	1,005	990	15	1,015	1,000	15	10	1.0
South Carolina								
ABE	13,164	-	13,164	13,326	-	13,326	162	1.2
AVE	-	-	-	-	-	-	-	-
CDAE	1,564	-	1,564	835	-	835	-729	-46.6
MDT	500	-	500	513	-	513	13	2.6
South Dakota								
ABE	1,225	325	900	1,450	450	1,000	225	18.4
AVE	5,053	-1,015	4,038	7,632	2,929	4,703	2,579	51.0
CDAE	1,610	-	1,610	397	-	397	-1,213	-75.3
MDT	369	369	-	299	239	60	-70	-19.0
Tennessee								
ABE	14,304	-	14,304	15,000	-	15,000	696	4.9
AVE	22,271	-	22,271	25,000	-	25,000	2,729	12.3
CDAE	1,169	-	1,169	800	-	800	-369	-31.6
MDT	3,193	3,193	-	3,500	3,500	-	307	9.6
Texas								
ABE	45,000	-	45,000	49,000	-	49,000	4,000	8.9
AVE	218,767	-	218,767	220,000	-	220,000	1,233	0.6
CDAE	24,600	2,100	22,500	26,700	700	26,000	2,100	8.5
MDT	8,437	8,231	206	9,295	8,848	447	858	10.2

Table 12.--Changes in enrollment for the four OE-sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 8.--Changes in enrollment for the four OE-sponsored adult education programs, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and four OE-sponsored adult education programs	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Utah								
ABE	1,676	-	1,676	1,396	-	1,396	-280	-16.7
AVE	20,576	-	20,576	21,000	-	21,000	424	2.1
CDAE	4,316	-	4,316	1,165	-	1,165	-3,151	-73.0
MDT	-	-	-	-	-	-	-	-
Vermont								
ABE	2,020	-	2,020	2,386	-	2,386	366	18.1
AVE	3,129	-	3,129	3,675	-	3,675	546	17.5
CDAE	450	-	450	587	-	587	137	30.4
MDT	533	485	48	715	679	36	182	34.2
Virginia								
ABE	10,761	-	10,761	11,000	-	11,000	239	2.2
AVE	82,790	-	82,790	85,000	-	85,000	2,210	2.7
CDAE	5,770	-	5,770	1,957	-	1,957	-3,813	-66.1
MDT	3,616	3,574	42	4,154	4,105	48	538	14.9
Washington								
ABE	4,149	300	3,849	4,421	394	4,027	272	6.6
AVE	175,458	79,016	96,442	140,641	80,095	60,546	-34,817	-19.8
CDAE	13,831	-	13,831	9,274	-	9,274	-4,557	-32.9
MDT	1,855	1,855	-	1,800	1,800	-	-55	-3.0
West Virginia								
ABE	10,195	150	10,045	10,058	1,250	8,808	-137	-1.3
AVE	17,441	-	17,441	18,000	-	18,000	559	3.2
CDAE	3,328	-	3,328	3,456	-	3,456	128	3.8
MDT	646	646	-	593	593	-	-53	-8.2
Wisconsin								
ABE	3,401	300	3,101	4,090	375	3,715	689	20.3
AVE	136,929	-	136,929	154,194	-	154,194	17,265	12.6
CDAE	6,487	-	6,487	7,000	-	7,000	513	7.9
MDT	2,555	2,555	-	2,280	2,280	-	-275	-10.8
Wyoming								
ABE	703	-	703	912	-	912	209	29.7
AVE	573	437	136	588	450	138	15	2.6
CDAE	717	-	717	619	-	619	-98	-13.7
MDT	400	350	50	400	350	50	0	0
Outlying areas								
ABE	21,053	-	21,053	20,278	45	20,233	-775	-3.7
AVE	24,180	1,114	23,066	40,858	958	39,900	16,678	69.0
CDAE	6,965	-	6,965	465	-	465	-6,500	-93.3
MDT	2,835	2,773	62	2,995	2,818	177	160	5.6
American Samoa								
ABE	-	-	-	135	45	90	135	100.0
AVE	-	-	-	73	13	60	73	100.0
CDAE	-	-	-	-	-	-	-	-
MDT	-	-	-	75	55	20	75	100.0
Canal Zone	-	-	-	-	-	-	-	-
Guam								
ABE	476	-	476	362	-	362	-114	-23.9
AVE	100	99	1	92	91	1	-8	-8.0
CDAE	-	-	-	-	-	-	-	-
MDT	122	122	-	75	75	-	-47	-38.5
Puerto Rico								
ABE	20,239	-	20,239	19,238	-	19,238	-1,001	-4.9
AVE	24,080	1,015	23,065	40,573	834	39,739	16,493	68.5
CDAE	6,965	-	6,965	465	-	465	-6,500	-93.3
MDT	2,456	2,456	-	2,543	2,543	-	87	3.5
Trust Terr., Pac. Is.								
ABE	-	-	-	93	-	93	93	100.0
AVE	-	-	-	120	20	100	120	100.0
CDAE	-	-	-	-	-	-	-	-
MDT	195	195	-	145	145	-	-50	-25.6
Virgin Islands								
ABE	338	-	338	450	-	450	112	33.1
AVE	-	-	-	-	-	-	-	-
CDAE	-	-	-	-	-	-	-	-
MDT	62	-	62	157	-	157	95	153.2

1/ Full-time is at least 15 hours of instruction per week.
2/ Part-time is less than 15 hours of instruction per week.
3/ Less than 0.05 percent.
NOTE.--See text for explanation of difference in figures provided by State respondents to this survey and figures reported by program offices in the Office of Education.

	Enrollment part-time (%)	
	1968-69	1969-70
ABE	81.5	80.8
AVE	83.9	83.1
CDAE	94.4	93.8
MDT	8.5	11.0

Table 12 shows that between 1968-69 and 1969-70 the (national) percentage change in enrollments for each of the four USOE programs ranged from a decrease of 15.5 percent to an increase of 8.8 percent. The Civil Defense Adult Education program was beginning to be phased out at that time and the data reflect it. Adult Vocational Education, representing 30.1 percent of the total enrollment for 1968-69, experienced only a 6.8 percent increase in enrollment for 1969-70, while total enrollment for all of adult education increased by 10.8 percent.

Excluding the Adult Vocational Education figures, the percentage increase in all other enrollments over the two years for what then may be called adult general education (which, it must be recognized, include other "occupational" programs) is 12.5 percent (this percentage is derived by subtracting Adult Vocational Education enrollment figures in columns 2 and 6 respectively of table 9 and refiguring). These figures repeat the pattern noted earlier in this report. Together these data show that while Adult Vocational Education enrollments continue to increase, their rate of increase cannot keep up with that of enrollments in the adult general education programs. Adult Vocational Education is not growing as fast as adult general education, and this situation may be more striking than the figures indicate, for there is reason to believe the general adult education figures are more likely to be underestimates than the Adult Vocational Education enrollments. The Vocational Education Act of 1963 with amendments in succeeding years makes eligibility for federal support contingent on the reporting of vocational education enrollments.

[*Publisher's Note:* In two comprehensive studies, one published and one to be published, both posthumously, by Ms. Okes she provides data consistent with the findings and thesis here. The reports are: *Participation in Adult Education, Final Report, 1969,* National Center for Education Statistics (U.S. Government Printing Office, Washington, D.C. 20402; Stock No. 1780-01374; $2.95) and *Participation in Adult Education, 1972,* in press. The data are based on national samples of noninstitutionalized people 17 years and older who were not full-time students in high school or college. Collected by the Bureau of the Census in their monthly Current Population Surveys (CPS), the data covered the 12 months preceding each May of 1969 and 1972. Over the three year period the number of persons who took one or more adult education courses or activities that were sponsored by the public grade or high school increased 11.7 percent.

The data can also be analyzed according to the participants' selection of the type of course taken. Calculating the percentage increase in enrollment for each of two types of occupational categories over the three year period, we find that the category, "Professional Skills" grew by the greater percentage: 43.7 percent, while "Technical and Vocational Skills" grew by only 0.3 percent.

If we look at the actual numbers involved, however, we find that the fast rate of growth in the area of "professional skills" may not be as reliable as we first supposed. The reason is that the number of persons who took a course they labelled "Professional Skills" was a very small part of the total number of persons taking adult education in the public schools in any year during the period covered by the survey. The number of students involved in a course tagged "Technical and Vocational Skills" was much greater: in fact, in 1969 there were almost four times as many public school adult students identified with a course on technical and vocational skills (318,000) as professional skills (87,000) in 1969.

The insight gained from looking at the numbers themselves, rather than only at the percentages, also helps us understand better the slow rate of growth in adult education for vocational and technical skills. Since the base number was so large, a rate of growth of 0.3 percent is placed in perspective. Nevertheless, it is clear that if the technical and vocational skills figure were not included in the overall rate of growth of adult students in public schools, that figure would be higher. In fact, it would be 13.9 percent instead of 11.7 percent.

Ms. Okes' *Participation* data were further analyzed in a recent report entitled "An Analysis of Selected Issues in Adult Education," which was prepared for the U.S. Office of Education's Office of Planning, Budgeting and Evaluation by Kirschner Associates, Inc. (Washington, D.C.), in February 1976. This report places in wider context the participants' use of "public grade and high schools" for adult education. Rather than focusing on the nature of courses, participant selection of reasons were examined on the question, "Why did you take this course or activity?" Text tables a. and b. show the results.

The first table indicates for 1969 and 1972 the percentages of participants who turned to the public grade or high school as sponsor and their reasons for taking an adult education course. Other possible sponsors include 2-year colleges, 4-year colleges, labor organizations, community organizations, employers, and trade schools. The second table shows the percentage distribution by reason of participants whose courses were sponsored by a public grade or high school and, again, their reasons for taking the courses.

Table a. Comparing the number of adult education students attending public grade and high schools to the total number of adult education students in the U.S.: 1969 and 1972

(*numbers in thousands*)

Reasons[1]	1969 Total Participation	1969 Percent of Public Grade and High Sch. Participants to Total	1972 Total Participation	1972 Percent of Public Grade and High Sch. Participants to Total
For general information	1,856	22.5	2,513	*18.6
To improve or advance in job	5,898	6.7	6,714	*5.3
To get a new job	1,423	9.1	1,779	8.1
For community activity	342	3.6	418	3.6
For personal or family interests	2,588	26.0	3,694	23.5
For social or recreational reasons	870	25.0	1,019	26.3

[1] Participants with "Other" responses not included.
*Differs with statistical significance from the 1969 percentage.

Table b. Comparing the number of adult education students attending public grade and high schools to the total number of students attending public schools: 1969 and 1972

(*numbers in thousands*)

Reasons[1]	1969 Total Participants in Public Grade and High School	1972 Total Participants in Public Grade and High School
	1,970	2,200
	% of total	% of total
	100.0	100.0
For general information	21.2	21.3
To improve or advance in job	19.9	*16.0
To get a new job	6.6	6.5
For community activity	0.6	0.7
For personal or family interests	34.2	*39.5
For social or recreational reasons	11.0	12.2

[1] Participants with "Other" responses not included.
*Differs with statistical significance from the 1969 percentage.

Although two points in time do not necessarily establish a trend, the changes are consistent with Ms. Okes' findings and the earlier conclusions of Dr. John B. Holden. The growth in number of participants in job related courses in the public schools does not keep pace with the field as a whole. Even though the Census estimates are lower than those in this report (see p. 60 for explanations), the numbers provide reliable indices of relationships and changes over time. Little complacency is possible for the future role of the "public grade and high school" as sponsor of adult education when it is realized that the percent increase here over the three year period was 11.7, while the number of participants for all other sponsors grew 22.2 percent or almost twice as rapidly. The future role of the public schools as offerors of adult education may be decided by which of the participants' many interests the system chooses to cater to. *End of Publisher's Note.*]

Community Colleges and Junior Colleges

State coordinators were asked to submit one report on adult education run by state education agencies and another on those run by community colleges but because states vary in their organization, some were able to do this and others were not. Nineteen states provided separate data on adult public education programs administered by their public community or junior colleges. Other states did not keep such statistics. Therefore, the figures in table 13 are probably low.

Substracting data in column 2 of table 13 from column 2 of table 9, we can calculate that in 1968-69, a minimum of 15.3 percent of the students enrolled in adult education were attending programs conducted by community colleges. In the same way, comparing the community college enrollments with the total enrollments in federally-, state- and locally-sponsored programs with data in tables 10 and 13, we calculate that enrollments in community college adult education programs represented 18 percent of the total enrollments in federal programs, 7 percent in state-sponsored programs and 16.4 percent of the locally-sponsored programs. Because it is known that there were more adult education students enrolled in community colleges than were reported, these percentages are minimums.

The data suggest that the community colleges tend to attract a greater proportion of full-time students than does adult education as a whole. The percentages are based on

	Community college enrollment percent part-time	
	1968-69	1969-70
Total	79.3	76.9
Federal	77.0	74.0
State	98.7	98.5
Local	77.6	75.2

Table 13.--Changes in adult education enrollments for community and junior colleges at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70*

Table 9.--Changes in adult education enrollments for community and junior colleges at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70

State or other area and level of governmental sponsorship of adult education	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
50 States and D.C.	1,275,961	264,440	1,011,521	1,341,744	309,611	1,032,133	65,783	5.2
Federal	834,190	192,047	642,143	820,389	215,178	607,211	-13,801	-1.7
State	125,342	1,652	123,690	140,886	2,165	138,723	15,544	12.4
Local	316,429	70,741	245,688	380,469	94,270	286,199	64,040	20.2
Alabama	1,413	225	1,190	1,825	172	1,653	412	29.2
Federal	-	-	-	-	-	-	-	-
State	1,413	225	1,190	1,825	172	1,653	412	29.2
Local	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-
Arizona	4,342	2,323	2,019	3,250	1,618	1,632	-1,092	-25.1
Federal	3,067	2,301	766	2,456	1,593	843	-631	-20.6
State	90	-	90	106	-	106	16	17.8
Local	1,185	22	1,163	708	25	683	477	-40.3
Arkansas	-	-	-	-	-	-	-	-
California	149,087	65,598	83,489	193,630	88,102	105,528	44,543	29.9
Federal	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Local	149,087	65,598	83,489	193,630	88,102	105,528	44,543	29.9
Colorado	-	-	-	-	-	-	-	-
Connecticut	2,565	-	2,565	2,875	-	2,875	310	12.1
Federal	-	-	-	-	-	-	-	-
State	2,565	-	2,565	2,875	-	2,875	310	12.1
Local	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-
District of Columbia	-	-	-	-	-	-	-	-
Florida	139,251	18,823	120,408	151,724	20,395	131,329	12,493	9.0
Federal	61,173	18,823	42,350	66,695	20,395	46,300	5,522	9.0
State	-	-	-	-	-	-	-	-
Local	78,058	-	78,058	85,029	-	85,029	6,971	8.9
Georgia	128,393	2,066	126,327	122,803	2,275	120,528	-5,590	-4.4
Federal	128,393	2,066	126,327	122,803	2,275	120,528	-5,590	-4.4
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-
Illinois	-	-	-	-	-	-	-	-
Indiana	-	-	-	-	-	-	-	-
Iowa	123,166	22,069	101,097	119,777	27,382	92,395	-3,389	-2.8
Federal	61,923	22,069	39,854	57,189	27,382	29,807	-4,734	-7.6
State	61,243	-	61,243	62,588	-	62,588	1,345	2.2
Local	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-
Maryland	10,457	178	10,259	15,522	107	15,415	5,085	48.7
Federal	2,675	178	2,497	2,789	107	2,682	114	4.3
State	5,292	-	5,292	7,696	-	7,696	2,404	45.4
Local	2,470	-	2,470	5,037	-	5,037	2,567	103.9
Massachusetts	5,000	-	5,000	5,000	-	5,000	0	0
Federal	5,000	-	5,000	5,000	-	5,000	0	0
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Michigan	-	-	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-
Missouri	10,179	3,569	6,610	12,723	4,461	8,262	2,544	25.0
Federal	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Local	10,179	3,569	6,610	12,723	4,461	8,262	2,544	25.0
Montana	1,656	228	1,428	1,657	292	1,365	1	0.1
Federal	193	-	193	44	-	44	-149	-77.2
State	-	-	-	-	-	-	-	-
Local	1,463	228	1,235	1,613	292	1,321	150	10.3

Table 13.–Changes in adult education enrollments for community and junior colleges at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1968-69 and 1969-70*--Continued

Table 9.--Changes in adult education enrollments for community and junior colleges at each level of governmental sponsorship, with numbers for full-time and part-time students, by State or other area: United States, 1969-69 and 1969-70--Cont.

State or other area and level of governmental sponsorship of adult education	1968-69 enrollments			1969-70 enrollments			Changes in total enrollments, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Nebraska	2,450	-	2,450	4,300	-	4,300	1,850	75.5
Federal	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Local	2,450	-	2,450	4,300	-	4,300	1,850	75.5
Nevada	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-
New Mexico	2,060	899	1,161	4,033	1,341	2,692	1,973	95.8
Federal	-	-	-	-	-	-	-	-
State	2,060	899	1,161	4,033	1,341	2,692	1,973	95.8
Local	-	-	-	-	-	-	-	-
New York	41,627	525	41,102	45,632	567	45,065	4,005	9.6
Federal	1,038	525	513	1,121	567	554	83	8.0
State	16,670	-	16,670	18,002	-	18,002	1,332	8.0
Local	23,919	-	23,919	26,509	-	26,509	2,590	10.8
North Carolina	177,428	27,969	149,459	206,501	34,491	172,010	29,073	16.4
Federal	171,680	27,519	144,161	198,852	33,941	164,911	27,172	15.8
State	5,748	450	5,298	7,649	550	7,099	1,901	33.1
Local	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	-	-
Oklahoma	-	-	-	-	-	-	-	-
Oregon	158,281	32,128	126,153	173,130	39,247	133,883	14,849	9.4
Federal	110,390	31,148	79,242	121,480	38,197	83,283	11,090	10.1
State	22,080	80	22,000	25,700	100	25,600	3,620	16.4
Local	25,811	900	24,911	25,950	950	25,000	139	0.5
Pennsylvania	3,053	-	3,053	5,230	26	5,204	2,177	71.3
Federal	85	-	85	273	26	247	188	221.2
State	2,443	-	2,443	3,197	-	3,197	754	30.9
Local	525	-	525	1,760	-	1,760	1,235	235.2
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-
Tennessee	562	-	562	800	-	800	238	42.3
Federal	-	-	-	-	-	-	-	-
State	562	-	562	800	-	800	238	42.3
Local	-	-	-	-	-	-	-	-
Texas	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-
Washington	315,031	87,842	227,189	271,332	89,135	182,197	-43,699	-13.9
Federal	288,573	87,418	201,155	241,707	88,695	153,012	-46,866	-16.2
State	5,176	-	5,176	9,415	-	9,415	1,239	23.9
Local	21,282	424	20,858	23,210	440	22,770	1,928	9.1
West Virginia	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-
Outlying areas	-	-	-	750	457	293	750	100.0
Federal	-	-	-	332	162	170	332	100.0
State	-	-	-	418	295	123	418	100.0
Local	-	-	-	-	-	-	-	-
American Samoa	-	-	-	750	457	293	750	100.0
Federal	-	-	-	332	162	170	332	100.0
State	-	-	-	418	295	123	418	100.0
Local	-	-	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-
Trust Terr., Pac. Is.	-	-	-	-	-	-	-	-
Virgin Islands	-	-	-	-	-	-	-	-

1/ Full-time is at least 15 hours of instruction per week. 2/ Part-time is less than 15 hours of instruction per week.

*The absence of statistics for any one state does not necessarily mean no public Community and Junior Colleges, the state may not have had the ability to report them separately.

analysis of figures in table 13. Pursuing similar analyses with tables 9 and 10, we find that except for state-sponsored programs the community college part-time percentages are lower than for total enrollments of which they are a part. The percentages for total enrollments for 1968-69 for the different levels of sponsorship are for total, 85.6; for federal, 82.7; for state, 81.9; and for local, 96.1. No bias in unreported data is assumed.

Enrollments in adult education programs at community colleges as reported by the states have not been increasing at the same rate as in adult education in the public education system as a whole. Table 13 (column 9) shows that community college enrollments increased by 5.2 percent between 1968-69 and 1969-70, while all adult education enrollments (of which community college enrollments are a part) increased by 10.8 percent during the same period.

In table 10 we saw that, in general, enrollments in adult education programs were increasing most rapidly in the locally-sponsored programs and least rapidly in the federal ones. This same pattern holds true for growth in community college enrollments, as is apparent in column 9 of table 13. In fact, that same growth pattern is even smoother and steeper for community colleges than for all of adult education in the public education system.

Cooperatively-offered Programs

Table 14 reports on the number of adult education students enrolled in programs offered by more than one agency. (The figures may not quite represent the national situation, since eight states did not submit statistics in this category.) Of all the students enrolled in public adult education courses in 1968-69, 872,805 students, or 10.5 percent, were enrolled in cooperatively-offered programs.

These data can also be looked at according to the governmental level of the program's sponsor. Students in cooperatively-offered programs were 12.7 percent of all the students in federally-sponsored programs, 14 percent of all students in state-sponsored programs and, notably, only 1.8 percent in locally-sponsored programs. (These figures were computed from data in tables 14 and 10.)

Further Analysis of the Data

Text table L presents summary data of enrollment figures for 1968-69 given in tables 8 through 14 and through the use of data on which table 4 was based. It is also an example of one way to reorganize and analyze the enrollment data; there are many others. Persons interested in non-federally involved programs, for instance, can combine state and local figures; those interested in federal programs other than the four OE programs can subtract the appropriate figures from total federal program data; and those focusing on changes in part-time enrollments can refigure percentages excluding consideration of those defined as full-time enrollees. These same analyses and additional ones can be done with the 1969-70 statistics and comparisons made.

One intent behind the organization of text table L was to isolate the subcategories of adult public education enrollments in programs sponsored by state education agencies from those sponsored by community colleges. It was not possible to do this completely. One problem was that program coordinators in a few states did not make it clear whether the figures they reported covered state education agencies or community colleges or both. The data from these states were placed in the category, "Both state education agencies and community colleges." A second problem was that the state of Wisconsin ascribed all of its enrollments to "vocational education." Since it was not possible to allocate the Wisconsin figure, it has been given its own category in table L. Similarly, information on a large public school nutritional program in New York is presented in its own category. Although the data in these last two categories are not included with data on state education agencies and the community colleges, they are part of the figures given for the 50 states and the District of Columbia.

A second intent behind the organization of text table L was to "peel away" the more inclusive statistics to arrive at some "core" figures which represent the most dependable or conservative numbers of people enrolled in each kind of program. To arrive at this more dependable number, the number of students enrolled in the cooperatively-administered programs was subtracted from each of the totals. This was done because in these programs, the degree of involvement for the public education system was unclear. Another ten percent of the total was subtracted to compensate for those students who may have enrolled in two programs and been counted twice. The resulting figures are, for all the categories, conservative estimates.

Table L. Components of adult education enrollment statistics (50 states and D.C.): 1968-69

	Total	Cooperating agency	Minus cooperating agency	Possible duplication (10%)	Conservative statistics
50 states and D.C.	8,346,828	872,805	7,474,023	747,401	6,726,621
State education agencies	5,116,286	284,332	4,831,954	483,195	4,348,759
Community colleges	1,275,961	188,006	1,087,955	108,796	979,159
Both state education agencies and community colleges	891,549	160,919	730,630	73,063	657,567
Wisonsin: vocational education	653,032	239,548	413,484	41,348	372,136
New York nutritional program	410,000	---	410,000	41,000	369,000

Table 14.--Enrollments in cooperatively offered adult education in the public education system at each level of governmental sponsorship, by State or other area: United States, 1968-69

Table 10.--Enrollments in cooperatively offered adult education in the public education system at each level of governmental sponsorship, by State or other area, United States, 1968-69

State or other area	Total	Level of governmental sponsorship		
		Federal	State	Local
1	2	3	4	5
50 States and D.C	872,805	588,833	250,136	33,836
Alabama	111,093	111,093	-	-
Alaska	1,599	1,473	31	95
Arizona	2,872	2,565	-	307
Arkansas	6,797	6,797	-	-
California	22,540	22,540	-	-
Colorado	18,856	18,856	-	-
Connecticut	1,131	1,131	-	-
Delaware	688	75	-	613
District of Columbia	-	-	-	-
Florida	18,940	16,230	2,710	-
Georgia	755	755	-	-
Hawaii	2,563	-	2,563	-
Idaho	-	-	-	-
Illinois	7,829	7,829	-	-
Indiana	3,075	3,075	-	-
Iowa	100	100	-	-
Kansas	18,447	17,072	1,375	-
Kentucky	-	-	-	-
Louisana	200	200	-	-
Maine	1,300	1,300	-	-
Maryland	5,564	5,564	-	-
Massachusetts	-	-	-	-
Michigan	-	-	-	-
Minnesota	24,471	24,471	-	-
Mississippi	-	-	-	-
Missouri	3,238	3,238	-	-
Montana	12,020	11,792		228
Nebraska	9,958	9,734	224	-
Nevada	12,308	12,308	-	-
New Hampshire	3,188	3,188	-	-
New Jersey	-	-	-	-
New Mexico	2,130	406	1,724	-
New York	23,338	208	1,656	21,474
North Carolina	3,601	3,601	-	-
North Dakota	-	-	-	-
Ohio	420	-	420	-
Oklahoma	1,070	1,070	-	-
Oregon	65,170	65,170	-	-
Pennsylvania	72,398	55	72,258	85
Rhode Island	2,280	281	1,999	-
South Carolina	1,350	1,350	-	-
South Dakota	9,010	9,010	-	-
Tennessee	3,193	3,193	-	-
Texas	45,182	35,680	-	9,502
Utah	6,225	5,675	-	550
Vermont	983	983	-	-
Virginia	10,761	10,761	-	-
Washington	92,376	86,218	5,176	982
West Virginia	3,115	3,115	-	-
Wisconsin	239,548	79,548	160,000	-
Wyoming	1,103	1,103	-	-
Outlying areas	2,065	231	1,834	-
American Samoa	-	-	-	-
Canal Zone	-	-	-	-
Guam	23	23	-	-
Puerto Rico	2,042	208	1,834	-
Trust Terr., Pac. Is.	-	-	-	-
Virgin Islands	-	-	-	-

The 1969 Adult Education Participation Survey

In May, 1969, the Bureau of the Census (Department of Commerce) at the behest of NCES included some questions about participation in adult education in its monthly Current Population Survey (CPS). NCES hoped to use the data to assess the extent of the general public's participation in adult education from different sponsors or "instructional sources." Since NCES collected its data for the present survey from institutions of public education, the perspective on adult education in the United States provided by this survey is narrower than that of the Current Population Survey, which is based on information gathered from a sample of citizens. Statistics on adult education participation from the Census study provide a context for review of the NCES figures on the institutional data on enrollment, although differences between the surveys in objectives and procedures require caution in comparisons. In particular, the Census survey offers data on the relative use of sponsors by citizens for adult education.

One member in each of the approximately 50,000 households (105,000 people) surveyed by the Census in May of 1969 was asked a "screener" question. The question determined which household members aged 17 or over who were not full-time students had participated in adult education and the "instructional source" or sponsor of their activities. Using these data, Census estimated that 13,150,000 people had had one or more adult education activities during the year prior to May, 1969. The categories suggested as "instructional sources" are those listed in text table M.

Table M. Number and percent of participants in public and nonpublic adult education programs offered by selected sources: 1969

	Estimated number of participants	Percent[1] of 13,150,000 participants estimated
Public or private school	3,638,000	27.7
College or university part-time	3,312,000	25.2
Job training	3,613,000	27.5
Correspondence courses	1,052,000	8.0
Community organizations	1,764,000	13.4
Tutor or private instructor	758,000	5.8
Other	1,348,000	10.3

[1] Percentages total more than 100.0 because some students participated in more than one adult education activity with a different instructional service.

These data represent unduplicated counts of individuals by sponsor. It has been published by the U.S. Office of Education as Report No. OE 13041, *"Participation in Adult Education, 1969, Initial Report."* (reference 26)

Although the Census interviewers tried to help respondents place a course in the correct category, there was some confusion since the distinction between the categories is not always clearcut. For example, some people who were taking vocational courses at public schools may have had their course counted as belonging to the category "job training." Also, some of the students counted in the "college or university part-time" category were undoubtedly attending public community or junior colleges.

Despite such confusion, the public schools emerge in the Census survey as a major sponsor of adult education. Text table M indicates that 27.7 percent of the participants in adult education were taking courses from "public or private schools." (It is assumed that the majority of these particpatns were attending public schools because the number of private schools in this country which offer adult education courses is very small.) [*Publisher's Note:* Later publications by Ms. Okes in the *Participation in Adult Education* series, which were mentioned earlier in another note (p. 54) provide additional information on this difficult area. (These later data were not available to Ms. Okes at the time she prepared this report.) In particular, the 1975 adult education participation survey sponsored by NCES and conducted by Census will give specific statistics on private and public grade or high schools.]

The first nationwide survey of participation in adult education was conducted by the Census Bureau in 1957 for the U.S. Office of Education. Conducted twelve years before the 1969 survey, this earlier survey turned up similar data. John B. Holden, then with that office, played a significant role in initiating the study. Using the data reported by Wann and Woodward (reference 47), he concluded one out of every four of the estimated 9,000,000 participants in adult education were enrolled in programs sponsored by public boards of education (reference 14).

While proportions in adult education statistics may emphasize consistencies between surveys, absolute numbers in different studies can diverge markedly for the same year. This may be because, as text table A in this report shows, procedures and definitions have impacted sharply on results. Consequently, discrepancies shown in text tables L and M should not be surprising. The survey of institutions by state seems to yield higher figures for adult education enrollment in the public education system than the national household survey, but this may be because methodological and taxonomic problems remain to be surmounted in both types of surveys.

For example, in this (NCES) survey of institutions, enrollments of people in prison and the armed forces were included but they were omitted from the Census survey. Duplicative registrations continue as a possibly serious problem in institutional data. Adults enrolled for 15 hours or more were counted in this survey; but they were not counted in the national survey because there they were considered

Table 15.--Instructional staff for adult education in the public education system, at each level of governmental sponsorship, by State or other area: United States, 1968-69

Table 11.--Instructional staff for adult education in the public education system, at each level of governmental sponsorship, by State or other area: United States, 1968-69

State or other area	Total	Federally sponsored			State-sponsored	Locally sponsored
		Total Federal	Selected 1/	Other		
1	2	3	4	5	6	7
50 States and D.C	229,361	116,504	115,582	922	42,250	70,607
State average	4,497.3	2,284.4	2,266.3	18.1	828.4	1,384.5
Alabama	3,555	3,527	3,527	-	28	-
Alaska	491	347	347	-	47	97
Arizona	1,460	1,417	1,417	-	8	35
Arkansas	587	518	518	-	69	-
California	16,599	5,703	5,703	-	6,741	4,155
Colorado	2,368	2,225	2,225	-	-	143
Connecticut	3,506	1,458	1,457	1	2,048	-
Delaware	860	399	399	-	299	162
District of Columbia	424	212	143	69	212	-
Florida	12,878	5,809	5,706	103	3,631	3,438
Georgia	4,066	4,066	4,022	44	-	-
Hawaii	949	442	439	3	507	-
Idaho	681	681	681	-	-	-
Illinois	11,720	4,037	4,037	-	7,683	-
Indiana	3,650	2,368	2,368	-	1,282	-
Iowa	5,201	3,018	3,018	-	2,014	169
Kansas	1,112	820	820	-	292	-
Kentucky	1,255	1,255	1,255	-	-	-
Louisiana	2,089	1,694	1,694	-	395	-
Maine	1,278	395	395	-	883	-
Maryland	4,682	2,517	2,357	160	1,147	1,018
Massachusetts	3,779	1,124	1,124	-	2,655	-
Michigan	2,850	2,850	2,850	-	-	-
Minnesota	5,924	4,152	3,859	293	-	1,772
Mississippi	1,868	1,868	1,868	-	-	-
Missouri	4,646	1,143	1,143	-	-	3,503
Montana	1,110	473	473	-	-	637
Nebraska	3,939	2,449	2,449	-	66	1,424
Nevada	541	541	541	-	-	-
New Hampshire	906	588	588	-	85	233
New Jersey	20,771	2,098	2,098	-	1,196	17,477
New Mexico	567	295	291	4	220	52
New York	32,629	5,433	5,401	32	1,968	25,228
North Carolina	5,251	5,069	5,069	-	182	-
North Dakota	219	219	219	-	-	-
Ohio	8,012	4,214	4,214	-	14	3,784
Oklahoma	1,696	1,696	1,696	-	-	-
Oregon	5,198	2,901	2,901	-	1,012	1,285
Pennsylvania	7,346	3,625	3,625	-	3,690	31
Rhode Island	880	299	299	-	82	499
South Carolina	1,374	666	632	34	600	108
South Dakota	852	428	428	-	-	424
Tennessee	2,625	1,880	1,880	-	45	700
Texas	8,475	7,372	7,372	-	-	1,103
Utah	2,488	1,446	1,446	-	1,034	8
Vermont	354	354	354	-	-	-
Virginia	6,043	3,031	3,031	-	762	2,250
Washington	6,697	6,158	6,035	123	53	486
West Virginia	3,654	3,268	3,268	-	-	386
Wisconsin	9,082	7,782	7,726	56	1,300	-
Wyoming	174	174	174	-	-	-
Outlying areas	2,838	1,564	1,564	-	1,274	-
American Samoa	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-
Guam	142	93	93	-	49	-
Puerto Rico	2,630	1,424	1,424	-	1,206	-
Trust Terr., Pac. Is.	13	10	10	-	3	-
Virgin Islands	53	37	37	-	16	-

1/ See table a for identification of the 27 selected federally sponsored programs.

full-time students. This would make the figures for the NCES institutional survey high.

On the other hand, underestimations could arise in a national survey because people may not define or admit their activities as adult education or because they may refrain from cooperating fully with the survey. Also, certain areas of the country may have such highly concentrated participation in adult education that they elude the full effectiveness of current techniques of sampling and weighting to national estimates. Progress and value in adult education measurement will profit from experience and criticism; in fact, both are essential.

INSTRUCTIONAL STAFF

The following seven tables on instructional staff, tables 15 through 21, are patterned after those on enrollments. The statistics are presented state by state, for the years 1968-69 and 1969-70, by levels of governmental sponsorship, for full- and part-time commitments, by selected programs, for community colleges, and for cooperative programs.

A definition of "instructional staff" was given in the instructions which accompanied the form OE-2323 (A sample of this form appears in appendix). By that definition, a member of the instructional staff could be someone who was teaching one class or many. Nor was there a limit on class size. The definition of a "full-time" teacher paralleled the definition used for a "full-time" student: 15 hours or more of instruction per week. Counselors, librarians and administrative personnel such as supervisors, principals and clerks, were not considered "instructional staff."

While all of the teachers counted as instructional staff by the present survey fit within the definition employed, there was still a great variety in what they taught and in the nature of their responsibilities because the programs in which they taught were quite different.

Figures on the number of instructional staff in public adult education programs do not give much indication of the variety of programs these teachers are teaching in but they can, when put next to student enrollment figures, reveal a good deal about how the resources of a particular program are allocated. For this reason, several tables showing the ratios of students to teachers in several programs follow this section on instructional staff.

Sponsorship

Like their students, teachers were involved in programs sponsored by federal, state and local levels of government. Table 15 indicates the distribution of the adult education instructional staff teaching in the public school system in 1969 across different levels of government. Of the total of 229,361, which excludes data on outlying areas, 50.8 percent were teaching in federally-sponsored programs, 18.4 in state-sponsored and 30.8 in local ones. (The state of Illinois combined its figures on instructional staff at the local level with its figures at the state level. If they had not done this, it is possible that the distribution between the state- and locally-sponsored programs might shift slightly.)

Full-time and Part-time

Table 16 presents data on the number of full-time and part-time instructors employed in each state during 1968-69 and 1969-70. The percentage change in the total number of teaching staff has also been calculated for each state. When these data are compared with the data on numbers of instructional staff collected by Woodward in her 1958-59 study (reference 49)—although these two surveys are not strictly comparable—we see that, over a ten year period, there has been an increase in the number of full-time teachers in public adult education. Without defining "full-time teacher" and "part-time teacher," Woodward reports that 2.2 percent of the 80,500 public adult education teachers surveyed were receiving a salary and employed full-time. This compares with 12.0 percent for 1968-69 as defined as full-time in this study (table 16, column 5). Another 89.8 percent in the Woodward study were paid for their work and employed part-time, while another 3.6 percent were already employed as regular school teachers and received no additional compensation for teaching adults. Finally, 4.4 percent were volunteers.

Overall, growth in the number of instructional staff between 1968-69 and 1969-70 lagged behind growth in the number of students. According to figures in columns 11 of table 16 and 11 of table 9, there was a 9.2 percent increase in the number of staff and a 10.8 percent increase in the number of students (the state averages are 10.3 for staff and 11.1 for students). This same pattern surfaces again in the student-staff ratios computed in the next section.

Statistics on growth in part-time and full-time instructional staffs suggest that most of this growth was the result of increases in full-time staff. Both the national figures and the state averages (columns 5 and 9 in table 16) show that proportionally there was a slightly greater number of full-time staff employed in 1969-70 than there was the previous year. Moreover, examining the individual state percentages in table 16 on this point for the two years, one finds that in 32 states there was a smaller percentage of part-time to full-time instructional staff employed in 1969-70 than in 1968-69 (and no change for 5 states). This evidence is consistent with an observation made earlier in this chapter that the public education system has been tending to increase its commitment to adult education and that this

Table 16.--Changes in adult education instructional staff, with numbers for full-time and part-time instructors, and part-time as a percent of total, for each year, by State or other area: United States, 1968-69 and 1969-70

Table 12.--Changes in adult education instructional staff, with numbers for full-time and part-time instructors, and part-time as a percent of total, for each year, by State or other area: United States, 1968-69 and 1969-70

State or other area	1968-69 instructional staff				1969-70 instructional staff				Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Part-time as percent of total	Total	Full-time 1/	Part-time 2/	Part-time as percent of total	Number	Percent
1	2	3	4	5	6	7	8	9	10	11
50 States and D.C.	229,361	27,425	201,936	3/ 88.0	250,381	31,793	218,588	3/ 87.3	21,020	3/ 9.2
State average	4,497.3	537.8	3,959.5	4/ 85.0	4,909.4	623.4	4,286.0	4/ 85.8	412.2	4/10.3
Alabama	3,555	650	2,905	81.7	3,830	675	3,155	82.4	275	7.7
Alaska	491	255	256	52.1	852	314	538	63.2	361	73.5
Arizona	1,460	447	1,013	69.4	1,934	796	1,138	58.8	474	32.5
Arkansas	587	54	533	90.8	633	73	560	88.5	46	7.8
California	16,599	5/ 2,103	5/ 14,496	5/ 87.3	18,223	5/ 2,309	5/ 15,914	5/ 87.3	1,624	9.8
Colorado	2,568	764	1,604	67.7	2,485	826	1,659	66.8	117	4.9
Connecticut	3,506	167	3,339	95.2	3,640	141	3,499	96.1	134	3.8
Delaware	860	130	730	84.9	865	145	720	83.2	5	.6
District of Columbia	424	142	282	66.5	418	152	266	63.6	-6	-1.4
Florida	12,878	2,076	10,802	83.9	13,719	2,188	11,531	84.1	841	6.5
Georgia	4,066	286	3,780	93.0	3,622	247	3,375	93.2	-444	-10.9
Hawaii	949	1	948	99.9	1,072	1	1,071	99.9	123	13.0
Idaho	681	-	681	100.0	760	-	760	100.0	79	11.6
Illinois	11,720	884	10,836	92.5	13,921	948	12,973	93.2	2,201	18.8
Indiana	3,650	1,146	2,504	68.6	3,747	1,522	2,225	59.4	97	2.7
Iowa	5,201	845	4,356	83.8	5,172	969	4,203	81.3	-29	-.6
Kansas	1,112	537	575	51.7	1,016	601	415	40.9	-96	-8.6
Kentucky	1,255	20	1,235	98.4	1,510	25	1,485	98.3	255	20.3
Louisiana	2,089	963	1,126	53.9	2,378	1,145	1,233	51.9	289	13.8
Maine	1,278	57	1,221	95.5	1,432	53	1,379	96.3	154	12.1
Maryland	4,682	251	4,431	94.6	4,995	252	4,743	95.0	313	6.7
Massachusetts	3,779	114	3,665	97.0	4,086	129	3,957	96.8	307	8.1
Michigan	2,850	356	2,494	87.5	3,895	576	3,319	85.2	1,045	36.7
Minnesota	5,924	520	5,404	91.2	5,857	549	5,308	90.6	-67	-1.1
Mississippi	1,868	145	1,723	92.2	1,834	179	1,655	90.2	-34	-1.8
Missouri	4,646	512	4,133	89.0	5,746	664	5,082	88.4	1,100	23.7
Montana	1,110	299	811	73.1	1,088	349	739	67.9	-22	-2.0
Nebraska	3,939	506	3,433	87.2	4,138	539	3,599	87.0	199	5.1
Nevada	541	136	405	74.9	510	105	405	79.4	-31	-5.7
New Hampshire	906	60	846	93.4	700	75	625	89.3	-206	-22.7
New Jersey	20,771	528	20,243	97.5	22,515	910	21,605	96.0	1,744	8.4
New Mexico	567	164	403	71.1	770	188	582	75.6	203	35.8
New York	32,629	3,552	29,077	89.1	36,286	3,797	32,489	89.5	3,657	11.2
North Carolina	5,251	1,280	3,971	75.6	7,362	1,706	5,656	76.8	2,111	40.2
North Dakota	219	10	209	95.4	261	16	245	93.9	42	19.2
Ohio	8,012	1,182	6,830	85.3	8,564	1,299	7,265	84.8	552	6.9
Oklahoma	1,696	207	1,489	87.8	1,892	267	1,625	85.9	196	11.6
Oregon	5,198	511	4,687	90.2	5,703	603	5,100	89.4	505	9.7
Pennsylvania	7,346	486	6,860	93.4	7,743	515	7,228	93.4	397	5.4
Rhode Island	880	29	851	96.7	987	61	926	93.8	107	12.2
South Carolina	1,374	8	1,366	99.4	2,286	275	2,011	88.0	912	66.4
South Dakota	852	187	665	78.1	854	221	633	74.1	2	.2
Tennessee	2,625	259	2,366	90.1	2,760	221	2,539	92.0	135	5.1
Texas	8,475	818	7,657	90.4	8,525	910	7,615	89.3	50	.6
Utah	2,488	114	2,374	95.4	2,969	133	2,836	95.5	481	19.3
Vermont	354	34	320	90.4	353	50	303	85.8	-1	-.3
Virginia	6,043	269	5,774	95.6	6,155	292	5,863	95.3	112	1.9
Washington	6,697	1,675	5,022	75.0	6,636	1,740	4,896	73.8	-61	-.9
West Virginia	3,654	209	3,445	94.3	3,547	255	3,292	92.8	-107	-2.9
Wisconsin	9,082	1,434	7,648	84.2	9,961	1,725	8,236	82.7	879	9.7
Wyoming	174	62	112	64.4	174	62	112	64.4	0	0
Outlying areas	2,858	420	2,418	85.2	3,206	542	2,664	83.1	368	13.0
American Samoa	-	-	-	-	41	26	15	36.6	41	100.0
Canal Zone	-	-	-	-	-	-	-	-	-	-
Guam	142	35	107	75.4	137	37	100	73.0	-5	-3.5
Puerto Rico	2,630	357	2,273	86.4	2,934	453	2,481	84.6	304	11.6
Trust Terr., Pac. Is.	13	13	-	0	42	16	26	61.9	29	223.1
Virgin Islands	53	15	38	71.7	52	10	42	80.8	-1	-1.9

1/ Full-time is at least 15 hours of instruction per week.
2/ Part-time is less than 15 hours of instruction per week.
3/ Weighted by populous States; to obtain national percent, figure across.
4/ States are equally weighted; to obtain State average, add column up and divide by 51.
5/ Full-time and part-time numbers and percents reflect approximation as described in table 10, footnote 3, for locally sponsored community college adult education.

increase in commitment is clearly evident in its manner of allocating instructional resources.

Data in column 9 of both tables 10 and 17 indicate growth between 1968-69 and 1969-70 for enrollments and instructional staff at each of the three levels of governmental sponsorship. The rate of growth, though, differed most strikingly at the local level where enrollmnets increased 23.3 percent as compared to only 10.1 percent for instructional staff.

The pattern between the two years for decreases in part-time instructors (or increase in full-time instructors) is not the same as the pattern of growth in total staff for the three governmental levels. The data below show an increase in part-time instructors for programs sponsored at the state level.

	Instructional staff percent part-time	
	1968-69	1969-70
Federal	80.2	78.7
State	92.8	93.8
Local	98.1	97.8

Use of Volunteers

Only three states reported figures on the number of volunteer teachers involved in public adult education, and all of these were teachers in special programs. In Colorado a religious group provided volunteer tutors for Spanish-speaking Americans enrolled in a cooperative program sponsored at the local level. South Carolina reported on a state literacy program which used volunteer teachers. Finally, 400 of Oregon's 5,000 teachers were volunteers teaching in three federal programs: New Careers, Job Corps and Small Business Administration. Doubtless, there were many other programs in public adult education which depended on volunteer teachers whose existence was not reported.

The 27 Selected Federal Programs

Table 18 shows growth in the number of instructional staff in each state to teach in the 27 federal programs. The same trend is suggested here as was evident with statistics in table 11 on enrollments: the smaller states for the 27 programs experienced a larger percentage increase in the number of instructional staff than did the larger states. In table 18, column 9, the average increase in the number of instructional staff in the average state was 8.4 percent, which was 13.5 percent larger than the 7.4 national increase where the larger states with greater numbers disproportionately influence the percentage increase. Additionally, one can derive from unpublished data that the average staff increase for programs for the average state was 13.2 percent or 1.78 times the percentage increase for the national figures of 7.4 percent. As with the earlier analysis for the 27 federal programs on enrollments, national totals mask differences between the states, between programs, and between programs within a state.

Table 18 also reports on the trend towards full-time instructors, as reflected in changes in the numbers of part-time and full-time instructors in the 27 programs between the years 1968-69 and 1969-70. During that period, the number of part-time teachers declined from 80.2 percent to 78.8 percent. One might hypothesize that receiving federal funding causes programs to employ more full-time teachers. This hypothesis is supported by data on page 65 which show that for state-sponsored programs the proportion of full-time staff decreased between 1968-69 and 1969-70, while for locally-sponsored programs the increase in full-time staff was only a fraction of what it was for the 27 federally-sponsored programs.

The Four U.S. Office of Education Programs

To some extent, the data on the number of instructional staff employed to teach in these four Office of Education programs complements that on enrollments in the same programs. According to data taken from Table 12, 39 percent of all the students enrolled in public adult education were enrolled in these four programs in 1968-69; they were taught by 41.6 percent of the instructional staff (these figures are based on data from table 19). Another complementory statistic was that students enrolled in the Adult Vocational Education program, who represented 30.1 percent of the enrollments in the four programs, were taught by 27.5 percent of the instructional staff.

The percentage increase in the number of instructional staff for Adult Vocational Education between 1968-69 and 1969-70, however, did not follow the pattern set by the other three programs (table 19, column 9). The figures below show that the percentage increase in the number of teachers in Adult Vocational Education programs exceeded the percentage increase in the number of other public adult education teachers across the country, although the percentage increase in enrollments in adult education programs other than Adult Vocational Education between the two years was almost twice that of the percentage increase in enrollments in Adult Vocational Education.

	Percentage increase, 1968-69 to 1969-70	
	Enrollment	Instructional staff
Total	10.8	9.2
Adult Vocational Education	6.8	10.7
All remaining adult education	12.5	8.6

Table 17.--Changes in adult education instructional staff at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70

Table 13.--Changes in adult education instructional staff at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70

State or other area and level of governmental sponsorship of adult education	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
50 States and D.C								
Federal	116,504	23,069	93,435	125,514	26,781	98,733	9,010	7.7
State	42,250	3,030	39,220	47,104	3,311	43,793	4,854	11.5
Local	70,607	1,326	69,281	77,763	1,701	76,062	7,156	10.1
Alabama								
Federal	3,527	646	2,881	3,796	671	3,125	269	7.6
State	28	4	24	34	4	30	6	21.4
Local	-	-	-	-	-	-	-	-
Alaska								
Federal	347	182	165	489	214	275	142	40.9
State	47	43	4	99	62	37	52	110.6
Local	97	10	87	264	38	226	167	172.2
Arizona								
Federal	1,417	444	973	1,902	788	1,114	485	34.2
State	8	3	5	11	8	3	3	37.5
Local	35	-	35	21	-	21	-14	-40.0
Arkansas								
Federal	518	51	467	544	69	475	26	5.0
State	69	3	66	89	4	85	20	29.0
Local	-	-	-	-	-	-	-	-
California								
Federal	5,703	1,253	4,450	5,799	1,319	4,480	96	1.7
State	6,741	322	6,419	7,230	330	6,900	489	7.3
Local	4,155	528	3,627	5,194	660	4,534	1,039	25.0
Colorado								
Federal	2,225	761	1,464	2,324	823	1,501	99	4.5
State	-	-	-	-	-	-	-	-
Local	143	3	140	161	3	158	18	12.6
Connecticut								
Federal	1,458	154	1,304	1,420	126	1,294	-38	-2.6
State	2,048	13	2,035	2,220	15	2,205	172	8.4
Local	-	-	-	-	-	-	-	-
Delaware								
Federal	399	64	335	376	61	315	-23	-5.8
State	299	66	233	346	84	262	47	15.7
Local	162	-	162	145	-	145	-17	-10.5
District of Columbia								
Federal	212	100	112	206	110	96	-6	-2.8
State	212	42	170	212	42	170	0	0
Local	-	-	-	-	-	-	-	-
Florida								
Federal	5,809	1,796	4,013	6,022	1,879	4,143	213	3.7
State	3,631	280	3,351	3,996	309	3,678	365	10.1
Local	3,438	-	3,438	3,701	-	3,701	263	7.7
Georgia								
Federal	4,066	286	3,780	3,622	247	3,375	-444	-10.9
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Hawaii								
Federal	442	1	441	515	1	514	73	16.5
State	507	-	507	557	-	557	50	9.9
Local	-	-	-	-	-	-	-	-
Idaho								
Federal	681	-	681	760	-	760	79	11.6
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Illinois								
Federal	4,037	792	3,245	4,731	850	3,881	694	17.2
State	7,683	92	7,591	8,187	98	8,089	1,201	15.6
Local	-	-	-	-	-	-	-	-

Table 17.--Changes in adult education instructional staff at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 13.--Changes in adult education instructional staff at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Indiana								
Federal	2,368	1,096	1,272	2,837	1,454	1,383	469	19.8
State	1,282	50	1,232	910	68	842	-372	-29.0
Local	-	-	-	-	-	-	-	-
Iowa								
Federal	3,018	837	2,181	2,908	959	1,949	-110	-4.2
State	2,014	-	2,014	2,082	-	2,082	68	3.4
Local	169	8	161	182	10	172	13	7.7
Kansas								
Federal	820	520	300	855	582	273	35	4.3
State	292	17	275	161	19	142	-131	-44.9
Local	-	-	-	-	-	-	-	-
Kentucky								
Federal	1,255	20	1,235	1,510	25	1,485	255	20.3
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Louisiana								
Federal	1,694	568	1,126	1,978	745	1,233	284	16.8
State	395	395	-	400	400	-	5	1.3
Local	-	-	-	-	-	-	-	-
Maine								
Federal	395	57	338	432	53	379	37	9.4
State	883	-	883	1,000	-	1,000	117	13.3
Local	-	-	-	-	-	-	-	-
Maryland								
Federal	2,517	229	2,288	2,478	207	2,271	-39	-1.6
State	1,147	-	1,147	1,318	-	1,318	171	14.9
Local	1,018	22	996	1,199	45	1,154	181	17.8
Massachusetts								
Federal	1,124	96	1,028	1,185	109	1,076	61	5.4
State	2,655	18	2,637	2,901	20	2,881	246	9.3
Local	-	-	-	-	-	-	-	-
Michigan								
Federal	2,850	356	2,494	3,895	576	3,319	1,045	36.7
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Minnesota								
Federal	4,152	440	3,712	4,080	464	3,616	-72	-1.6
State	-	-	-	-	-	-	-	-
Local	1,772	80	1,692	1,777	85	1,692	5	.3
Mississippi								
Federal	1,868	145	1,723	1,834	179	1,655	-34	-1.8
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Missouri								
Federal	1,143	293	850	2,010	385	1,625	867	75.9
State	-	-	-	-	-	-	-	-
Local	3,503	220	3,283	3,736	279	3,457	233	6.7
Montana								
Federal	473	284	189	550	330	220	77	16.3
State	-	-	-	-	-	-	-	-
Local	637	15	622	538	19	519	-99	-15.5
Nebraska								
Federal	2,449	391	2,058	2,480	403	2,077	31	1.3
State	66	9	57	59	11	48	-7	-10.6
Local	1,424	106	1,318	1,599	125	1,474	175	12.3
Nevada								
Federal	541	136	405	510	105	405	-31	-5.7
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-

Table 17.--Changes in adult education instructional staff at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 13.--Changes in adult education instructional staff at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
New Hampshire								
Federal	588	60	528	396	75	321	-192	-32.7
State	85	-	85	52	-	52	-33	-38.8
Local	233	-	233	252	-	252	19	8.2
New Jersey								
Federal	2,098	516	1,582	2,332	896	1,436	234	11.2
State	1,196	-	1,196	1,417	-	1,417	221	18.5
Local	17,477	12	17,465	18,766	14	18,752	1,289	7.4
New Mexico								
Federal	295	47	248	420	69	351	125	42.4
State	220	117	103	295	119	176	75	34.1
Local	52	-	52	55	-	55	3	5.8
New York								
Federal	5,433	2,422	3,011	5,718	2,559	3,159	285	5.3
State	1,968	1,130	838	2,139	1,238	901	171	8.7
Local	25,228	-	25,228	28,429	-	28,429	3,201	12.7
North Carolina								
Federal	5,069	1,253	3,816	7,172	1,676	5,496	2,103	41.5
State	182	27	155	190	30	160	8	4.4
Local	-	-	-	-	-	-	-	-
North Dakota								
Federal	219	10	209	249	16	233	30	13.7
State	-	-	-	12	-	12	12	100.0
Local	-	-	-	-	-	-	-	-
Ohio								
Federal	4,214	1,168	3,046	4,547	1,282	3,265	333	7.9
State	14	14	-	17	17	-	3	21.4
Local	3,784	-	3,784	4,000	-	4,000	216	5.7
Oklahoma								
Federal	1,696	207	1,489	1,892	267	1,625	196	11.6
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Oregon								
Federal	2,901	447	2,454	3,283	533	2,750	382	13.2
State	1,012	12	1,000	1,115	15	1,110	103	10.2
Local	1,285	52	1,233	1,305	55	1,250	20	1.6
Pennsylvania								
Federal	3,625	482	3,143	3,761	500	3,261	136	3.8
State	3,690	4	3,686	3,914	15	3,899	244	6.1
Local	31	-	31	68	-	68	37	119.4
Rhode Island								
Federal	299	28	271	374	60	314	75	25.1
State	82	1	81	88	1	87	6	7.3
Local	499	-	499	525	-	525	26	5.2
South Carolina								
Federal	666	8	658	944	275	669	278	41.7
State	600	-	600	1,200	-	1,200	600	100.0
Local	108	-	108	142	-	142	34	31.5
South Dakota								
Federal	428	160	268	410	189	221	-18	-4.2
State	-	-	-	-	-	-	-	-
Local	424	27	397	444	32	412	20	4.7
Tennessee								
Federal	1,880	259	1,621	1,985	221	1,764	105	5.6
State	45	-	45	55	-	55	10	22.2
Local	700	-	700	720	-	720	20	2.9
Texas								
Federal	7,373	670	6,702	7,220	681	6,539	-152	-2.1
State	-	-	-	-	-	-	-	-
Local	1,103	148	955	1,305	229	1,076	202	18.3

Table 13.--Changes in adult education instructional staff at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Utah	1,446	46	1,400	1,317	51	1,266	-129	-8.9
Federal	1,034	68	966	1,642	82	1,560	608	58.8
State	8	-	8	10	-	10	2	25.0
Local								
Vermont	354	34	320	353	50	303	-1	-.3
Federal	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Local								
Virginia	3,031	178	2,853	3,061	197	2,864	30	1.0
Federal	762	-	762	770	-	770	8	1.1
State	2,250	91	2,159	2,324	95	2,229	74	3.3
Local								
Washington	6,158	1,671	4,487	6,042	1,728	4,314	-116	-1.9
Federal	53	-	53	66	-	66	13	24.5
State	486	4	482	528	12	516	42	8.6
Local								
West Virginia	3,268	209	3,059	3,172	255	2,917	-96	-2.9
Federal	-	-	-	-	-	-	-	-
State	386	-	386	375	-	375	-11	-2.9
Local								
Wisconsin	7,782	1,134	6,648	8,641	1,405	7,236	859	11.0
Federal	1,300	300	1,000	1,320	320	1,000	20	1.5
State	-	-	-	-	-	-	-	-
Local								
Wyoming	174	62	112	174	62	112	0	0
Federal	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Local								
Outlying areas	1,564	251	1,313	1,956	352	1,604	392	25.1
Federal	1,274	169	1,105	1,250	190	1,060	-24	-1.9
State	-	-	-	-	-	-	-	-
Local								
American Samoa	-	-	-	16	5	11	16	100.0
Federal	-	-	-	25	21	4	25	100.0
State	-	-	-	-	-	-	-	-
Local								
Canal Zone	-	-	-	-	-	-	-	-
Guam	93	35	58	94	37	57	1	1.1
Federal	49	-	49	43	-	43	-6	-12.2
State	-	-	-	-	-	-	-	-
Local								
Puerto Rico	1,424	191	1,233	1,800	290	1,510	376	26.4
Federal	1,206	166	1,040	1,134	163	971	-72	-6.0
State	-	-	-	-	-	-	-	-
Local								
Trust Terr., Pac. Is.	10	10	-	12	10	2	2	20.2
Federal	3	3	-	30	6	24	27	900.0
State	-	-	-	-	-	-	-	-
Local								
Virgin Islands	37	15	22	34	10	24	-3	-8.1
Federal	16	-	16	18	-	18	2	12.5
State	-	-	-	-	-	-	-	-
Local								

1/ Full-time is at least 15 hours of instruction per week.
2/ Part-time is less than 15 hours of instruction per week.

Table 18.--Changes in instructional staff for the 27 selected[1] federally sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 to 1969-70

Table 14.--Changes in instructional staff for the 27 selected[1/] federally sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 to 1969-70

State or other area	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 2/	Part-time 3/	Total	Full-time 2/	Part-time 3/	Number	Percent
1	2	3	4	5	6	7	8	9
50 States and D.C.	115,582	22,928	92,654	124,147	26,332	97,815	8,565	7.4
State average	2,266.3	449.6	1,816.8	2,434.3	516.3	1,917.9	167.9	8.4
Alabama	3,527	646	2,881	3,796	671	3,125	269	7.6
Alaska	347	182	165	403	211	192	56	16.1
Arizona	1,417	444	973	1,902	788	1,114	485	34.2
Arkansas	518	51	467	544	69	475	26	5.0
California	5,703	1,253	4,450	5,799	1,319	4,480	96	1.7
Colorado	2,225	761	1,464	2,324	823	1,501	99	4.5
Connecticut	1,457	154	1,303	1,419	126	1,293	-38	-2.6
Delaware	399	64	335	376	61	315	-23	-5.8
District of Columbia	143	62	81	144	76	68	1	.7
Florida	5,706	1,796	3,910	5,923	1,879	4,044	217	3.8
Georgia	4,022	286	3,736	3,599	245	3,354	-423	-10.5
Hawaii	439	-	439	512	-	512	73	16.6
Idaho	681	-	681	760	-	760	79	11.6
Illinois	4,037	792	3,245	4,734	850	3,884	697	17.3
Indiana	2,368	1,096	1,272	2,837	1,454	1,383	469	19.8
Iowa	3,018	837	2,181	2,891	955	1,936	-127	-4.2
Kansas	820	520	300	855	582	273	35	4.3
Kentucky	1,255	20	1,235	1,510	25	1,485	255	20.3
Louisiana	1,694	568	1,126	1,969	736	1,233	275	16.2
Maine	395	57	338	432	53	379	37	9.4
Maryland	2,357	193	2,164	2,282	167	2,115	-75	-3.2
Massachusetts	1,124	96	1,028	1,185	109	1,076	61	5.4
Michigan	2,850	356	2,494	3,895	576	3,319	1,045	36.7
Minnesota	3,859	440	3,419	3,787	464	3,323	-72	-1.9
Mississippi	1,868	145	1,723	1,834	179	1,655	-34	-1.8
Missouri	1,143	293	850	2,010	385	1,625	867	75.9
Montana	473	284	189	524	304	220	51	10.8
Nebraska	2,449	391	2,058	2,450	403	2,047	1	(4/)
Nevada	541	136	405	510	105	405	-31	-5.7
New Hampshire	588	60	528	396	75	321	-192	-32.7
New Jersey	2,098	516	1,582	2,332	896	1,436	234	11.2
New Mexico	291	43	248	420	69	351	129	44.3
New York	5,401	2,414	2,987	5,682	2,550	3,132	281	5.2
North Carolina	5,069	1,253	3,816	7,172	1,676	5,496	2,103	41.5
North Dakota	219	10	209	249	16	233	30	13.7
Ohio	4,214	1,168	3,046	4,547	1,282	3,265	333	7.9
Oklahoma	1,696	207	1,489	1,892	267	1,625	196	11.6
Oregon	2,901	447	2,454	3,283	533	2,750	382	13.2
Pennsylvania	3,625	482	3,143	3,755	500	3,255	130	3.6
Rhode Island	299	28	271	374	60	314	75	25.1
South Carolina	632	-	632	644	-	644	12	1.9
South Dakota	428	160	268	410	189	221	-18	-4.2
Tennessee	1,880	259	1,621	1,985	221	1,764	105	5.6
Texas	7,372	670	6,702	7,220	681	6,539	-152	-2.1
Utah	1,446	46	1,400	1,317	51	1,266	-129	-8.9
Vermont	354	34	320	353	50	303	-1	-.3
Virginia	3,031	178	2,853	3,061	197	2,864	30	1.0
Washington	6,035	1,631	4,404	5,920	1,688	4,232	-115	-1.9
West Virginia	3,268	209	3,059	3,172	255	2,917	-96	-2.9
Wisconsin	7,726	1,128	6,598	8,583	1,399	7,184	857	11.1
Wyoming	174	62	112	174	62	112	0	0
Outlying areas	1,564	251	1,313	1,956	352	1,604	392	25.1
American Samoa	-	-	-	16	5	11	16	100.0
Canal Zone	-	-	-	-	-	-	-	-
Guam	93	35	58	94	37	57	1	1.1
Puerto Rico	1,424	191	1,233	1,800	290	1,510	376	26.4
Trust Terr., Pac. Is.	10	10	-	12	10	2	2	20.0
Virgin Islands	37	15	22	34	10	24	-3	-8.1

1/ See table a for identification of the 27 selected federally sponsored adult education programs.
2/ Full-time is at least 15 hours of instruction per week.
3/ Part-time is less than 15 hours of instruction per week.
4/ Less than 0.05 percent.

Table 19.--Changes in instructional staff for the four OE-sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70

Table 15.--Changes in instructional staff for the four OE-sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70

State or other area and four OE-sponsored adult education programs	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
50 States and District of Columbia								
Adult Basic Education (ABE)	21,368	2,478	18,890	21,840	2,733	19,107	472	2.2
Adult Vocational Education (AVE)	62,979	9,545	53,434	69,706	11,574	58,132	6,727	10.7
Civil Defense Adult Education (CDAE)	4,577	120	4,457	4,198	69	4,129	-379	-8.3
Manpower Development and Training (MDT)	6,582	5,366	1,216	7,128	5,855	1,273	546	8.3
Alabama								
ABE	669	15	654	676	18	658	7	1.0
AVE	768	393	375	778	398	380	10	1.3
CDAE	76	-	76	43	-	43	-33	-43.4
MDT	37	-	37	37	-	37	0	0
Alaska								
ABE	21	10	11	46	18	28	25	119.1
AVE	38	30	8	39	35	4	1	2.6
CDAE	58	58	-	35	35	-	-23	-39.7
MDT	46	40	6	61	54	7	15	32.6
Arizona								
ABE	172	7	165	155	7	148	-17	-9.9
AVE	1,107	340	767	1,585	657	928	478	43.2
CDAE	-	-	-	-	-	-	-	-
MDT	81	71	10	105	96	9	24	29.6
Arkansas								
ABE	495	38	457	509	51	458	14	2.8
AVE	-	-	-	-	-	-	-	-
CDAE	-	-	-	-	-	-	-	-
MDT	-	-	-	-	-	-	-	-
California								
ABE	878	32	846	900	40	860	22	2.5
AVE	5,828	247	5,581	5,850	250	5,600	22	.6
CDAE	20	-	20	20	-	20	0	0
MDT	777	774	3	774	774	-	-3	-.4
Colorado								
ABE	205	175	30	240	200	40	35	17.1
AVE	544	135	409	575	150	425	31	5.7
CDAE	95	-	95	89	-	89	-6	-6.3
MDT	23	23	-	26	23	3	3	13.0
Connecticut								
ABE	464	10	454	462	12	450	-2	-.4
AVE	591	44	547	662	39	623	71	12.0
CDAE	42	-	42	10	-	10	-32	-76.2
MDT	300	100	200	225	75	150	-75	-25.0
Delaware								
ABE	72	7	65	74	7	67	2	2.8
AVE	236	12	224	227	10	217	-9	-3.8
CDAE	20	-	20	7	-	7	-13	-6.5
MDT	24	24	-	30	30	-	6	25.0
District of Columbia								
ABE	22	14	8	27	14	13	5	22.7
AVE	46	-	46	38	-	38	-8	-17.4
CDAE	8	-	8	2	-	2	-6	-75.0
MDT	23	23	-	30	30	-	7	30.4
Florida								
ABE	879	88	791	940	100	840	61	6.9
AVE	4,485	1,538	2,947	4,631	1,588	3,043	146	3.3
CDAE	70	-	70	50	-	50	-20	-28.6
MDT	102	102	-	101	100	1	-1	-1.0
Georgia								
ABE	928	30	898	974	42	932	46	5.0
AVE	2,960	122	2,838	2,461	55	2,406	-499	-16.9
CDAE	3	3	-	3	3	-	0	0
MDT	123	123	-	123	123	-	0	0
Hawaii								
ABE	290	-	290	330	-	330	40	13.8
AVE	55	-	55	61	-	61	6	10.9
CDAE	6	-	6	6	-	6	0	0
MDT	6	-	6	7	-	7	1	16.7
Idaho								
ABE	87	-	87	90	-	90	3	3.5
AVE	-	-	-	-	-	-	-	-
CDAE	19	-	19	35	-	35	16	84.2
MDT	-	-	-	-	-	-	-	-
Illinois								
ABE	1,255	280	975	1,286	294	992	31	2.5
AVE	1,070	-	1,070	1,320	-	1,320	250	23.4
CDAE	73	-	73	73	-	73	0	0
MDT	471	461	10	515	508	7	44	9.3

Table 19.--Changes in instructional staff for the four OE-sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 15.--Changes in instructional staff for the four OE-sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and four OE-sponsored adult education programs	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Indiana								
ABE	270	10	260	312	12	300	42	15.6
AVE	1,616	808	808	1,980	1,155	825	364	22.5
CDAE	152	-	152	197	-	197	45	29.6
MDT	110	110	-	95	95	-	-15	-13.6
Iowa								
ABE	758	-	758	508	-	508	-250	-33.0
AVE	1,588	623	965	1,894	678	1,216	306	19.3
CDAE	84	-	84	40	-	40	-44	-52.4
MDT	44	34	10	62	43	19	18	40.9
Kansas								
ABE	138	-	138	142	-	142	4	2.9
AVE	439	439	-	502	502	-	63	14.4
CDAE	13	13	-	9	9	-	-4	-30.8
MDT	56	56	-	56	56	-	0	0
Kentucky								
ABE	557	-	557	526	-	526	-31	-5.6
AVE	364	-	364	584	-	584	220	60.4
CDAE	-	-	-	-	-	-	-	-
MDT	208	-	208	250	-	250	42	20.2
Louisiana								
ABE	690	-	690	715	15	700	25	3.6
AVE	869	469	400	1,098	593	505	229	26.4
CDAE	10	-	10	2	-	2	-8	-80.0
MDT	92	84	8	97	89	8	5	5.4
Maine								
ABE	131	-	131	152	2	150	21	16.0
AVE	189	-	189	214	-	214	25	13.2
CDAE	19	2	17	16	1	15	-3	-15.8
MDT	56	55	1	50	50	-	-6	-10.7
Maryland								
ABE	399	39	360	409	43	366	10	2.5
AVE	1,710	9	1,701	1,684	5	1,679	-26	-1.5
CDAE	-	-	-	1	-	1	-	-
MDT	176	109	67	86	69	17	-90	-51.1
Massachusetts								
ABE	217	6	211	225	8	217	8	3.7
AVE	425	-	425	450	-	450	25	5.9
CDAE	140	-	140	131	-	131	-9	-6.4
MDT	330	80	250	365	90	275	35	10.6
Michigan								
ABE	536	-	536	647	-	647	111	20.7
AVE	1,929	71	1,858	2,777	226	2,551	848	44.0
CDAE	-	-	-	(3/)	-	-	-	-
MDT	302	202	100	379	258	121	77	25.5
Minnesota								
ABE	123	13	110	106	14	92	-17	-13.8
AVE	2,218	-	2,218	2,290	-	2,290	72	3.3
CDAE	408	-	408	360	-	360	-48	-11.8
MDT	117	87	30	106	63	43	-11	-9.4
Mississippi								
ABE	299	-	299	307	7	300	8	2.7
AVE	946	19	927	980	50	930	34	3.6
CDAE	497	-	497	425	-	425	-72	-14.5
MDT	126	126	-	122	122	-	-4	-3.2
Missouri								
ABE	262	-	262	352	-	352	90	34.4
AVE	732	185	547	1,269	254	1,015	537	73.4
CDAE	9	-	9	2	-	2	-7	-77.8
MDT	122	92	30	139	108	31	17	13.9
Montana								
ABE	35	9	26	41	10	31	6	17.1
AVE	69	-	69	79	-	79	10	14.5
CDAE	89	-	89	105	-	105	16	18.0
MDT	38	38	-	45	45	-	7	18.4
Nebraska								
ABE	48	-	48	60	-	60	12	25.0
AVE	971	101	870	975	100	875	4	.4
CDAE	57	-	57	60	-	60	3	5.3
MDT	45	36	9	48	44	4	3	6.7
Nevada								
ABE	63	-	63	60	-	60	-3	-4.8
AVE	390	70	320	400	80	320	10	2.6
CDAE	20	-	20	22	-	22	2	10.0
MDT	66	66	-	23	23	-	-43	-65.2

Table 19.--Changes in instructional staff for the four OE-sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 15.--Changes in instructional staff for the four OE-sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and four OE-sponsored adult education programs	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
New Hampshire								
ABE	74	-	74	72	2	70	-2	-2.7
AVE	30	-	30	35	-	35	5	16.7
CDAE	75	-	75	75	-	75	0	.0
MDT	30	-	30	31	-	31	1	3.3
New Jersey								
ABE	485	70	415	552	49	503	67	13.8
AVE	1,079	59	1,020	932	90	842	-147	-13.6
CDAE	147	-	147	84	-	84	-63	-42.9
MDT	387	387	-	764	757	7	377	97.4
New Mexico								
ABE	142	-	142	230	-	230	88	62.0
AVE	109	13	96	124	15	109	15	13.8
CDAE	-	-	-	-	-	-	-	-
MDT	-	-	-	7	5	2	7	100.0
New York								
ABE	1,342	1,342	-	1,391	1,391	-	49	3.7
AVE	2,936	13	2,923	3,082	14	3,068	146	5.0
CDAE	41	-	41	38	-	38	-3	-7.3
MDT	372	359	13	354	340	14	-18	-4.8
North Carolina								
ABE	684	99	585	1,018	112	906	334	48.8
AVE	4,008	1,046	2,962	5,840	1,472	4,368	1,832	45.7
CDAE	* 99	-	99	55	-	55	-44	-44.4
MDT	153	108	45	132	92	40	-21	-13.7
North Dakota								
ABE	67	-	67	94	-	94	27	40.3
AVE	77	1	76	70	7	63	-7	-9.1
CDAE	61	-	61	74	-	74	13	21.3
MDT	14	9	5	11	9	2	-3	-21.4
Ohio								
ABE	632	-	632	710	10	700	78	12.3
AVE	2,813	459	2,354	2,975	475	2,500	162	5.8
CDAE	-	-	-	-	-	-	-	-
MDT	310	250	60	345	280	65	35	11.3
Oklahoma								
ABE	600	100	500	645	120	525	45	7.5
AVE	989	-	989	1,100	-	1,100	111	11.2
CDAE	6	6	-	4	4	-	-2	-33.3
MDT	66	66	-	108	108	-	42	63.6
Oregon								
ABE	92	11	81	102	12	90	10	10.9
AVE	1,473	340	1,133	1,808	417	1,391	335	22.7
CDAE	126	-	126	95	-	95	-31	-24.6
MDT	65	45	20	70	50	20	5	7.7
Pennsylvania								
ABE	819	-	819	809	-	809	-10	-1.2
AVE	2,658	362	2,296	2,791	380	2,411	133	5.0
CDAE	-	-	-	-	-	-	-	-
MDT	131	120	11	130	120	10	-1	-.8
Rhode Island								
ABE	76	-	76	85	-	85	9	11.8
AVE	167	18	149	185	23	162	18	10.8
CDAE	33	-	33	30	-	30	-3	-9.1
MDT	18	7	11	70	33	37	52	288.9
South Carolina								
ABE	600	-	600	611	-	611	11	1.8
AVE	-	-	-	-	-	-	-	-
CDAE	8	-	8	8	-	8	0	0
MDT	20	-	20	21	-	21	1	5.0
South Dakota								
ABE	81	12	69	84	14	70	3	3.7
AVE	215	47	168	169	65	104	-46	-21.4
CDAE	33	2	31	28	1	27	-5	-15.2
MDT	12	12	-	11	6	5	-1	+8.3
Tennessee								
ABE	894	-	894	900	-	900	6	.7
AVE	716	14	702	865	21	844	149	20.8
CDAE	25	-	25	20	-	20	-5	-20.0
MDT	245	245	-	200	200	-	-45	-18.4
Texas								
ABE	2,213	-	2,213	1,770	-	1,770	-443	-20.0
AVE	3,481	81	3,400	3,481	81	3,400	0	0
CDAE	1,035	35	1,000	1,215	15	1,200	180	17.4
MDT	421	411	10	464	442	22	43	10.2

Table 19.--Changes in instructional staff for the four OE-sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

Table 15.--Changes in instructional staff for the four OE-sponsored adult education programs, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and four OE-sponsored adult education programs	1968-69 instructional staff			1969-70 instructional staff			Change in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Utah								
ABE	114	-	114	117	-	117	3	2.6
AVE	743	-	743	760	-	760	17	2.3
CDAE	301	-	301	157	-	157	-144	-47.8
MDT	-	-	-	-	-	-	-	-
Vermont								
ABE	118	-	118	125	-	125	7	5.9
AVE	181	2	179	163	2	161	-18	-9.9
CDAE	16	1	15	7	1	6	-9	-56.3
MDT	31	29	2	48	45	3	17	54.8
Virginia								
ABE	569	3	566	570	10	560	1	.2
AVE	2,250	91	2,159	2,324	95	2,229	74	3.3
CDAE	124	-	124	70	-	70	-54	-43.6
MDT	88	84	4	97	92	5	9	10.2
Washington								
ABE	177	10	167	147	12	135	-30	-17.0
AVE	3,835	954	2,831	3,866	1,005	2,861	31	.8
CDAE	62	-	62	79	-	79	17	27.4
MDT	120	120	-	120	120	-	0	0
West Virginia								
ABE	290	12	278	282	60	222	-8	-2.8
AVE	850	-	850	878	-	878	28	3.3
CDAE	104	-	104	108	-	108	4	3.8
MDT	61	61	-	58	58	-	-3	-4.9
Wisconsin								
ABE	293	36	257	215	27	188	-78	-26.6
AVE	4,152	390	3,762	4,821	587	4,234	669	16.1
CDAE	258	-	258	274	-	274	16	6.2
MDT	75	75	-	68	68	-	-7	-9.3
Wyoming								
ABE	43	-	43	40	-	40	-3	-7.0
AVE	34	-	34	34	-	34	0	0
CDAE	35	-	35	38	-	38	3	8.6
MDT	62	62	-	62	62	-	0	0
Outlying areas								
ABE	718	-	718	967	3	964	244	34.0
AVE	531	106	425	647	198	449	116	21.8
CDAE	42	2	40	12	2	10	-30	-71.4
MDT	211	101	110	214	107	107	3	1.4
American Samoa								
ABE	-	-	-	2	1	1	2	100.0
AVE	-	-	-	8	-	8	8	100.0
CDAE	-	-	-	-	-	-	-	-
MDT	-	-	-	4	3	1	4	100.0
Canal Zone	-	-	-	-	-	-	-	-
Guam								
ABE	48	-	48	49	-	49	1	2.1
AVE	26	26	-	27	27	-	1	3.9
CDAE	-	-	-	-	-	-	-	-
MDT	12	2	10	8	-	8	-4	-33.3
Puerto Rico								
ABE	660	-	660	902	0	902	242	36.7
AVE	505	80	425	609	170	439	104	20.6
CDAE	42	2	40	12	2	10	-30	-71.4
MDT	183	89	94	189	97	92	6	3.3
Trust Terr., Pac. Is.								
ABE	-	-	-	3	2	-	2	100.0
AVE	-	-	-	3	1	2	3	100.0
CDAE	-	-	-	-	-	-	-	-
MDT	10	10	-	7	7	-	-3	-30.0
Virgin Islands								
ABE	10	-	10	12	-	12	2	20.0
AVE	-	-	-	-	-	-	-	-
CDAE	-	-	-	-	-	-	-	-
MDT	6	-	6	6	-	6	0	0

1/ Full-time is at least 15 hours of instruction per week.
2/ Part-time is less than 15 hours of instruction per week.
3/ Public school staff for this program already reported elsewhere.

With the exception of the Civil Defense program, which was soon to be phased out, each of the Office of Education programs showed a decrease in proportion of part-time instructional staff to full-time staff in 1969-70. The data appear below.

	Instructional Staff, percent part-time	
	1968-69	1969-70
ABE	88.4	87.5
AVE	84.8	83.4
CDAE	97.4	98.4
MDT	18.5	17.9

Community Colleges and Junior Colleges

Figures below on enrollments and staff of adult education programs in public community and junior colleges indicate that there was more similarity between percentages of enrollments and staff involved in federally- and locally-sponsored programs than in state-sponsored ones.

	Community and junior college adult education (percent of total)	
	Enrollment	Instructional staff
Total	15.3	16.8
Federal	18.0	19.0
State	7.0	11.3
Local	16.4	16.4

In order to discover the relative importance of the growth experienced by the public community and junior colleges as compared to the growth in adult public education as a whole, some computations were done. By subtracting community and junior college data on instructional staff (table 20) from total instructional staff data (table 16), the national percentage of change in the number of instructional staff can be reduced from 9.2 percent (increase) to 8.8 percent (increase). Comparing the figure of 8.8 percent to the figure of 10.9 percent, which is the percentage increase in the number of instructional staff employed by the community and junior colleges during the two year period, it becomes clear that the public community and junior colleges were increasing their number of instructional staff at a faster rate then were some other segments of the public adult education system.

This pattern is not repeated, however, with enrollment data. In fact, as data from tables 9 and 13 show, enrollments in public community colleges and junior colleges did not increase at as great a rate when compared with other adult education agencies in the public education systems; the rate was about one-half the total.

The point was made earlier in the section on enrollments that enrollments in public adult education increased progressively more rapidly as we look from the federally-sponsored to the state-sponsored to the locally-sponsored programs. Table 10 presents the figures of 6.0, 9.7 and 23.3 percent, respectively. This pattern is virtually absent in the total or all inclusive data on increases in instructional staff (Table 17 shows figures of 7.7, 11.5 and 10.1 percent), but it re-emerges with greater force in the data on percentage increase in enrollments and number of instructional staff in public community and junior colleges. The enrollment figures were 1.7 (decrease), 12.4 and 20.4 (both increases) (table 13). Table 20 reports on instructional staff: 8.5, 10.1 and 15.8 percent increases. These data clearly show that in those two years locally- or community-sponsored programs offered by public community and junior colleges were expanding on a percentage basis more rapidly in enrollments and staff than were the state- or federally-sponsored programs.

Finally, as was true for all of public adult education, community and junior colleges employed a greater proportion of full-time instructional staff in 1969-70 than in 1968-69. This was true for programs at all governmental levels of sponsorship.

	Community College Instructional Staff, Percent Part-time	
	1968-69	1969-70
Total	83.8	83.1
Federal	76.1	74.9
State	98.0	97.6
Local	92.9	92.3

Cooperatively-offered Programs

Figures on the number of instructional staff teaching in the public school systems adult education programs which involved cooperating agencies in 1968-69 appear in table 21. They are arranged by governmental level of the program's sponsorship. This permits the interested analyst to determine for each state the proportion of that state's instructional staff to the total number of instructional staff teaching in all the states in public adult education programs involving cooperating agencies (through use of statistics in table 15). The number of staff involved in programs with cooperating agencies was 21,328 in 1968-69. Using data from table 15, we can calculate that instructors teaching in cooperatively-offered programs represented 9.3 percent of the total number of instructional staff employed in the public school system that year.

Similarly, using data from tables 8 and 14 on enrollments, we can compare the extent of the involvement of cooperating agencies at each governmental level by comparing data on

Table 20.--Changes in adult education instructional staff for community and junior colleges at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70

Table 16.--Changes in adult education instructional staff for community and junior colleges at each level of governmental sponsorship , with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70

State or other area and level of governmental sponsorship of adult education	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
50 States and D.C.	38,463	6,215	32,248	42,654	7,195	35,459	4,191	10.9
Federal	22,156	5,301	16,855	24,046	6,037	18,009	1,890	8.5
State	4,753	95	4,658	5,233	125	5,108	480	10.1
Local	11,554	819	10,735	13,375	1,033	12,342	1,821	15.8
Alabama	28	4	24	34	4	30	6	21.4
Federal	-	-	-	-	-	-	-	-
State	28	4	24	34	4	30	6	21.4
Local	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-
Arizona	135	36	99	138	48	90	3	2.2
Federal	95	36	59	109	43	66	14	14.7
State	5	-	5	8	5	3	3	60.0
Local	35	-	35	21	-	21	-14	-40.0
Arkansas	-	-	-	-	-	-	-	-
California	4,155	528	3,627	5,194	660	4,534	1,039	25.0
Federal	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Local	4,155	528	3,627	5,194	660	4,534	1,039	25.0
Colorado	-	-	-	-	-	-	-	-
Connecticut	140	-	140	155	-	155	15	10.7
Federal	-	-	-	-	-	-	-	-
State	140	-	140	155	-	155	15	10.7
Local	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-
District of Columbia	-	-	-	-	-	-	-	-
Florida	4,884	764	4,120	5,180	847	4,333	296	6.1
Federal	1,446	764	682	1,479	847	632	33	2.3
State	-	-	-	-	-	-	-	-
Local	3,438	-	3,438	3,701	-	3,701	263	7.7
Georgia	3,083	245	2,838	2,604	198	2,406	-479	-15.5
Federal	3,083	245	2,838	2,604	198	2,406	-479	-15.5
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-
Illinois	-	-	-	-	-	-	-	-
Iowa	5,049	841	4,208	4,990	959	4,031	-59	-1.2
Federal	3,035	841	2,194	2,908	959	1,949	-127	-4.2
State	2,014	-	2,014	2,082	-	2,082	68	3.4
Local	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-
Maryland	401	5	396	544	10	534	143	35.7
Federal	93	5	88	145	10	135	52	55.9
State	220	-	220	286	-	286	66	30.0
Local	88	-	88	113	-	113	25	28.4
Massachusetts	125	-	125	125	-	125	0	0
Federal	125	-	125	125	-	125	0	0
State	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-
Michigan	-	-	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-
Missouri	630	220	410	796	279	517	166	26.4
Federal	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Local	630	220	410	796	279	517	166	26.4
Montana	101	15	86	110	19	91	9	8.9
Federal	4	-	4	3	-	3	-1	-25.0
State	-	-	-	-	-	-	-	-
Local	97	15	82	107	19	88	10	10.3

Table 20.--Changes in adult education instructional staff for community and junior colleges at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Con.

Table 16.--Changes in adult education instructional staff for community and junior colleges at each level of governmental sponsorship, with numbers for full-time and part-time instructors, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	1968-69 instructional staff			1969-70 instructional staff			Changes in total instructional staff, 1968-69 to 1969-70	
	Total	Full-time 1/	Part-time 2/	Total	Full-time 1/	Part-time 2/	Number	Percent
1	2	3	4	5	6	7	8	9
Nebraska	122	-	122	219	8	211	97	79.5
Federal	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Local	122	-	122	219	8	211	97	79.5
Nevada	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-
New Mexico	98	48	50	179	56	123	81	82.7
Federal	-	-	-	-	-	-	-	-
State	98	48	50	179	56	123	81	82.7
Local	-	-	-	-	-	-	-	-
New York	2,164	39	2,125	2,371	43	2,328	207	9.6
Federal	130	39	91	145	43	102	15	11.5
State	838	-	838	901	-	901	63	7.5
Local	1,196	-	1,196	1,325	-	1,325	129	10.8
North Carolina	5,251	1,280	3,971	7,362	1,706	5,656	2,111	40.2
Federal	5,069	1,253	3,816	7,172	1,676	5,496	2,103	41.5
State	182	27	155	190	30	160	8	4.4
Local	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	-	-
Oklahoma	-	-	-	-	-	-	-	-
Oregon	5,198	511	4,687	5,703	603	5,100	505	9.7
Federal	2,901	447	2,454	3,283	533	2,750	382	13.2
State	1,012	12	1,000	1,115	15	1,100	103	10.2
Local	1,285	52	1,233	1,305	55	1,250	20	1.6
Pennsylvania	157	4	153	260	15	245	103	65.6
Federal	17	-	17	31	-	31	14	82.4
State	118	4	114	163	15	148	45	38.1
Local	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-
Tennessee	45	-	45	55	-	55	10	22.2
Federal	-	-	-	-	-	-	-	-
State	45	-	45	55	-	55	10	22.2
Local	-	-	-	-	-	-	-	-
Texas	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-
Washington	6,697	1,675	5,022	6,635	1,740	4,895	-62	-.9
Federal	6,158	1,671	4,487	6,042	1,728	4,314	-116	-1.9
State	53	-	53	65	-	65	12	22.6
Local	486	4	482	528	12	516	42	8.6
West Virginia	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-
Outlying areas	-	-	-	41	26	15	41	100.0
Federal	-	-	-	16	5	11	16	100.0
State	-	-	-	25	21	4	25	100.0
Local	-	-	-	-	-	-	-	-
American Samoa	-	-	-	41	26	15	41	100.0
Federal	-	-	-	16	5	11	16	100.0
State	-	-	-	25	21	4	25	100.0
Local	-	-	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-
Trust Terr., Pac. Is.	-	-	-	-	-	-	-	-
Virgin Islands	-	-	-	-	-	-	-	-

1/ Full-time is at least 15 hours of instruction per week.
2/ Part-time is less than 15 hours of instruction per week.

Table 21.--Instructional staff in cooperatively offered adult education in the public education system at each level of governmental sponsorship, by State or other area: United States, 1968-69

Table 17.--Instructional staff in cooperatively offered adult education in the public education system at each level of governmental sponsorship, by State or other area: United States, 1968-69

State or other area	Total	Level of governmental sponsorship		
		Federal	State	Local
1	2	3	4	5
50 States and D.C	21,328	17,613	2,127	1,588
Alabama	2,014	2,014	-	-
Alaska	126	108	5	13
Arizona	113	106	-	7
Arkansas	495	495	-	-
California	977	977	-	-
Colorado	1,069	1,069	-	-
Connecticut	60	60	-	-
Delaware	47	3	-	44
District of Columbia	-	-	-	-
Florida	214	94	120	-
Georgia	42	42	-	-
Hawaii	62	-	62	-
Idaho	-	-	-	-
Illinois	522	522	-	-
Indiana	110	110	-	-
Iowa	8	8	-	-
Kansas	243	230	13	-
Kentucky	-	-	-	-
Louisiana	8	8	-	-
Maine	19	19	-	-
Maryland	188	188	-	-
Massachusetts	-	-	-	-
Michigan	-	-	-	-
Minnesota	993	993	-	-
Mississippi	-	-	-	-
Missouri	133	133	-	-
Montana	419	404	-	15
Nebraska	1,039	1,016	23	-
Nevada	539	539	-	-
New Hampshire	57	57	-	-
New Jersey	-	-	-	-
New Mexico	113	36	77	-
New York	1,199	42	83	1,074
North Carolina	99	99	-	-
North Dakota	-	-	-	-
Ohio	14	-	14	-
Oklahoma	33	33	-	-
Oregon	747	747	-	-
Pennsylvania	345	15	325	5
Rhode Island	57	5	52	-
South Carolina	58	58	-	-
South Dakota	180	180	-	-
Tennessee	245	245	-	-
Texas	1,967	1,549	-	418
Utah	296	288	-	8
Vermont	47	47	-	-
Virginia	569	569	-	-
Washington	1,576	1,519	53	4
West Virginia	252	252	-	-
Wisconsin	3,929	2,629	1,300	-
Wyoming	105	105	-	-
Outlying areas	70	19	51	-
American Samoa	-	-	-	-
Canal Zone	-	-	-	-
Guam	7	7	-	-
Puerto Rico	63	12	51	-
Trust Terr., Pac. Is.	-	-	-	-
Virgin Islands	-	-	-	-

instructional staff and enrollment for each level of government with the national figures on instructional staff and enrollment. Making these comparisons, we find that in locally-sponsored programs, 2.3 percent of the staff and 1.8 percent of the students were enrolled in cooperatively offered programs. For state-sponsored programs, these percents change to 5.0 (staff) and 14.0 (enrollment); for federally-sponsored programs, 15.1 (staff) and 12.7 (enrollment). Working only with national figures on the numbers of teachers and students participating in programs administered by cooperating agencies, we find that they represent 9.3 percent and 10.5 percent respectively of the national totals of instructional staff and students.

The noticeable difference between the percentages of enrollments and instructional staff in state-sponsored programs is a good example of a situation where the national figures have been distorted by the inclusion of figures from unusual programs; this is especially likely to happen when the total numbers involved are relatively small. In this case the difference was largely caused by the inclusion of cooperating agency data on the state of Wisconsin where the ratio of enrollments to instructional staff was exceptionally high. Excluding Wisconsin state data from all calculations, we find at the state level of sponsorship for the remaining states that 2.0 percent of instructors teaching in state programs and 5.6 percent of students enrolled in state-sponsored programs were in programs which were cooperatively-offered.

RATIO OF ENROLLMENT TO INSTRUCTIONAL STAFF

Although the enrollment-instructional staff ratio is clearly a useful piece of data, it is rarely used in the survey reports on public adult education. One reason may be that there has been less data on instructional staff than on enrollments. There exists, however, enough data to compute some ratios; those in text table E of this report are based on data from previous studies.

Tables 22 through 26 use the statistics from the tables presented in this chapter to compute ratios of enrollment to instructional staff. This ratio expresses the number of students served by one instructor; the figure may represent an average for a particular state, for a type of program, for a particular level of sponsorship of a program, or particular agency program.

The number identified as the ratio is arrived at by dividing the number of instructional staff into the number of students enrolled. The solution, or "quotient," given in column 8, table 26, is the ratio. The dividend of 1 is implicit. Thus, for the state of Alabama, the enrollment-instructional staff ratio is 44.9/1 or 44.9. This figure was calculated by dividing 159,601 (column 2) by 3,555 (column 5).

Consistent with the format used throughout this report, ratios are reported for the nation, for the average state, for each state, by governmental level of sponsorship, for the 27 selected federal programs, the four U.S. Office of Education programs and the community and junior colleges. The last table in the series, table 26, ranks the states in three ways; by the percentage change in enrollment, percentage change in instructional staff (in both cases, the state with the largest increased was rated number one) and by the percentage change in the ratio of enrollment to instructional staff.

At first glance one might suppose that these ratios are somewhat inaccurate because no distinction has been made between part-time and full-time students and between part-time and full-time instructors. Nor has an effort been made to edit out the duplicates. However, since these problems are present to an equal extent on both sides of the ratio and involve proportionally small numbers, discrepancies may largely cancel themselves out. In any case, data available in earlier tables (tables 9-13 and 16-20) permit an investigator to deal separately with full-time and part-time figures or to weight them differently in calculations of other ratios.

Using the ratios to make evaluative judgements can be dangerous. Ratios can be misleading. A low ratio of instructors to students may mean a program is understaffed; it may mean nothing at all if the program involved happens to be a special program which employs only a minimum number of staff.[1] Ratios based on figures from a group of programs do not reveal very much about the size of the classes. Some programs may assign fewer students per teacher than the average program yet provide a high quality education because the program is run very efficiently; another program may have one teacher teaching a great number of students because the teachers are popular and the program is oversubscribed. In fact, it has yet to be proven that, on the whole, there is a close relationship between the value of the education a student receives and the size of the class he is taught in.

Enrollment-instructional staff ratios often change from year to year as the result of increases or decreases in either enrollments or staff. Since it is difficult to estimate these changes by looking at the two separate ratios, each change has been computed in table 22 both as a net difference and as a percentage change.

Changes in ratios are useful in two ways. They are evidence that changes in the allocation of a program's

[1] Iowa reported a local program in Des Moines and Sioux City featuring a travel film series in which one staff person serviced 20,000 clients. New York reported a special nutrition program offered through its Agricultural Extension Service in which 800 teachers handled 400,000 participants, a ratio of one to 500.

Table 22.--Ratio of enrollments to instructional staff in adult education at each level of governmental sponsorship, and change in ratio, by State or other area: United States, 1968-69 and 1969-70

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios, 1968-69 to 1969-70	
			Ratio	Percent
1	2	3	4	5
50 States and D.C.	36.4	36.9	0.5	1.4
Federal	39.8	39.2	-0.6	-1.5
State	42.2	41.5	-0.7	-1.7
Local	27.3	30.5	3.2	11.7
State average[1]	31.6	32.0	0.4	1.8
Alabama	44.9	43.9	-1.0	-2.2
Federal	44.9	43.8	-1.1	-2.5
State	50.5	53.7	3.2	6.3
Local	---	---	---	---
Alaska	20.9	16.2	-4.7	-22.5
Federal	21.3	17.4	-3.9	-18.3
State	22.9	17.2	-5.7	-24.9
Local	18.3	13.6	-4.7	-25.7
Arizona	24.3	18.9	-5.4	-22.2
Federal	23.9	18.7	-5.2	-21.8
State	48.8	41.2	-7.6	-15.6
Local	33.9	33.7	-0.2	-0.6
Arkansas	14.8	15.1	0.3	2.0
Federal	14.0	14.3	0.3	2.1
State	20.3	20.2	-0.1	-0.5
Local	---	---	---	---
California	64.9	66.1	1.2	1.9
Federal	64.5	69.1	4.6	7.1
State	83.1	84.5	1.4	1.7
Local	35.9	37.3	1.4	3.9
Colorado	35.0	33.4	-1.6	-4.6
Federal	34.9	33.3	-1.6	-4.6
State	---	---	---	---
Local	37.1	35.4	-1.7	-4.6
Connecticut	28.2	28.9	0.7	2.5
Federal	17.9	19.1	1.2	6.7
State	35.6	35.1	-0.5	-1.4
Local	---	---	---	---
Delaware	32.5	28.4	-4.1	-12.6
Federal	37.2	36.7	-0.5	-1.3
State	33.8	24.4	-9.4	-27.8
Local	18.3	15.9	-2.4	-13.1
District of Columbia	54.2	53.3	-0.9	-1.7
Federal	42.9	46.5	3.6	8.4
State	65.5	59.9	-5.6	-8.6
Local	---	---	---	---

See footnotes at end of table

Table 22.--Ratio of enrollments to instructional staff in adult education at each level of governmental sponsorship, and change in ratio, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios, 1968-69 to 1969-70	
			Ratio	Percent
1	2	3	4	5
Florida	45.0	45.6	0.6	1.3
Federal	53.9	55.3	1.4	2.6
State	51.9	51.8	-0.1	-0.2
Local	22.7	23.0	0.3	1.3
Georgia	37.6	41.5	3.9	10.4
Federal	37.6	41.5	3.9	10.4
State	---	---	---	---
Local	---	---	---	---
Hawaii	30.6	31.6	1.0	3.3
Federal	32.2	31.6	-0.6	-1.9
State	29.1	31.6	2.5	8.6
Local	---	---	---	---
Idaho	4.2	4.9	0.7	16.7
Federal	4.2	4.9	0.7	16.7
State	---	---	---	---
Local	---	---	---	---
Illinois	26.0	26.1	0.1	0.4
Federal	21.1	23.6	2.5	11.9
State	16.5	14.4	-2.1	-12.7
Local	(2)	(2)	---	---
Indiana	26.2	23.3	-2.9	-11.1
Federal	10.2	6.7	-3.5	-34.3
State	55.8	75.2	19.4	34.8
Local	---	---	---	---
Iowa	38.0	53.8	15.8	41.6
Federal	20.5	19.7	-0.8	-3.9
State	30.4	30.1	-0.3	-1.0
Local	439.3	870.1	430.8	98.1
Kansas	40.4	49.6	9.2	22.8
Federal	39.7	38.8	-0.9	-2.3
State	42.5	106.8	64.3	151.3
Local	---	---	---	---
Kentucky	26.1	25.0	-1.1	-4.2
Federal	26.1	25.0	-1.1	-4.2
State	---	---	---	---
Local	---	---	---	---
Louisiana	38.6	35.8	-2.8	-7.3
Federal	41.1	37.3	-3.8	-9.3
State	28.1	28.0	-0.1	-0.4
Local	---	---	---	---
Maine	17.7	19.5	1.8	10.2
Federal	17.7	18.2	0.5	2.8
State	17.7	20.0	2.3	13.0
Local	---	---	---	---

See footnotes at end of table.

Table 22.--Ratio of enrollments to instructional staff in adult education at each level of governmental sponsorship, and change in ratio, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios, 1968-69 to 1969-70	
			Ratio	Percent
1	2	3	4	5
Maryland	35.2	36.1	0.9	2.6
Federal	21.2	22.2	1.0	4.7
State	28.8	29.2	0.4	1.4
Local	76.8	72.1	-4.7	-6.1
Massachusetts	24.4	23.5	-0.9	-3.7
Federal	22.9	23.0	-0.1	-0.4
State	25.1	23.7	1.4	5.6
Local	---	---	---	---
Michigan	47.3	46.3	-1.0	-2.1
Federal	47.3	46.3	-1.0	-2.1
State	---	---	---	---
Local	---	---	---	---
Minnesota	45.8	46.6	0.8	1.8
Federal	34.1	35.0	0.9	2.6
State	---	---	---	---
Local	73.4	73.2	-0.2	-0.3
Mississippi	34.9	39.0	4.1	11.8
Federal	34.9	39.0	4.1	11.8
State	---	---	---	---
Local	---	---	---	---
Missouri	20.2	19.9	-0.3	-1.5
Federal	35.4	28.7	-6.7	-18.9
State	---	---	---	---
Local	15.2	15.2	0	0
Montana	21.0	21.0	0	0
Federal	29.1	26.8	-2.3	-7.9
State	---	---	---	---
Local	15.1	15.1	0	0
Nebraska	28.5	29.1	0.6	2.1
Federal	31.9	32.2	0.3	0.9
State	58.7	103.8	45.1	76.8
Local	21.1	21.6	0.5	2.4
Nevada	22.8	24.8	2.0	8.8
Federal	22.8	24.8	2.0	8.8
State	---	---	---	---
Local	---	---	---	---
New Hampshire	27.3	31.9	4.6	16.9
Federal	32.8	39.7	6.9	21.0
State	5.8	29.2	23.4	403.5
Local	21.3	20.1	-1.2	-5.6
New Jersey	22.0	30.7	8.7	39.6
Federal	23.4	22.4	-1.0	-4.3
State	30.0	35.4	5.4	18.0
Local	21.3	31.4	10.1	47.4
New Mexico	18.4	19.0	0.6	3.3
Federal	23.5	21.2	-2.3	-9.8
State	12.2	16.2	4.0	32.8
Local	15.9	16.7	0.8	5.0

See footnotes at end of table.

Table 22.--Ratio of enrollments to instructional staff in adult education at each level of governmental sponsorship, and change in ratio, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios, 1968-69 to 1969-70	
			Ratio	Percent
1	2	3	4	5
New York	31.0	29.5	-1.5	-4.8
Federal	85.5	84.8	-0.7	-0.8
State	15.4	15.0	-0.4	-2.6
Local	20.5	19.5	-1.0	-4.9
North Carolina	33.8	28.1	-5.7	-16.9
Federal	33.9	27.7	-6.2	-18.3
State	31.6	40.3	8.7	27.5
Local	---	---	---	---
North Dakota	34.6	27.1	-7.5	-21.7
Federal	34.6	28.3	-6.3	-18.2
State	---	2.1	2.1	100.0
Local	---	---	---	---
Ohio	40.2	40.5	0.3	0.8
Federal	55.3	56.1	0.8	1.5
State	30.0	23.5	-6.5	-21.7
Local	23.4	22.9	-0.5	-2.1
Oklahoma	19.4	19.3	-0.1	-0.5
Federal	19.4	19.3	-0.1	-0.5
State	---	---	---	---
Local	---	---	---	---
Oregon	30.5	30.4	-0.1	-0.3
Federal	38.1	37.0	-1.1	-2.9
State	21.8	23.1	1.3	6.0
Local	20.1	19.9	-0.2	-1.0
Pennsylvania	37.4	37.3	-0.1	-0.3
Federal	28.6	28.5	-0.1	-0.4
State	46.2	45.9	-0.3	-0.7
Local	21.8	26.3	4.5	20.6
Rhode Island	34.2	36.7	2.5	7.3
Federal	26.3	21.7	-4.6	-17.5
State	37.2	35.7	-1.5	-4.0
Local	38.5	47.6	9.1	23.6
South Carolina	28.4	24.2	-4.2	-14.8
Federal	24.1	23.6	-0.5	-2.1
State	33.8	24.5	-9.3	-27.5
Local	25.0	25.0	0.0	0.0
South Dakota	28.1	35.8	7.7	27.4
Federal	36.6	48.4	11.8	32.2
State	---	---	---	---
Local	19.6	24.1	4.5	23.0
Tennessee	24.9	25.0	0.1	0.4
Federal	21.8	22.3	0.5	2.3
State	12.5	14.6	2.1	16.8
Local	34.1	33.3	-0.8	-2.4

See footnotes at end of table.

Table 22.–Ratio of enrollments to instructional staff in adult education at each level of governmental sponsorship, and change in ratio, by State or other area: United States, 1968-69 and 1969-70–Continued

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios, 1968-69 to 1969-70	
			Ratio	Percent
1	2	3	4	5
Texas	40.6	41.6	1.0	2.5
Federal	41.0	43.1	2.1	5.1
State	---	---	---	---
Local	37.8	32.9	-4.9	-13.0
Utah	25.0	24.0	-1.0	-4.0
Federal	22.3	22.4	0.1	0.5
State	28.5	24.8	-3.7	-13.0
Local	68.8	100.0	-31.2	-45.4
Vermont	17.7	21.5	3.8	21.5
Federal	17.7	21.5	3.8	21.5
State	---	---	---	---
Local	---	---	---	---
Virginia	36.0	35.8	-0.2	-0.6
Federal	34.0	33.4	-0.6	-1.8
State	41.5	42.9	1.4	3.4
Local	36.8	36.6	-0.2	-0.5
Washington	47.0	40.9	-6.1	-13.0
Federal	46.9	40.0	-6.9	-14.7
State	97.7	97.2	-0.5	-0.5
Local	43.8	44.0	0.2	0.5
West Virginia	20.4	20.7	0.3	1.5
Federal	20.4	20.7	0.3	1.5
State	---	---	---	---
Local	20.0	20.3	0.3	1.5
Wisconsin	71.9	71.9	0.0	0.0
Federal	63.4	62.7	-0.7	-1.1
State	123.1	132.6	9.5	7.7
Local	---	---	---	---
Wyoming	13.8	14.5	0.7	5.1
Federal	13.8	14.5	0.7	5.1
State	---	---	---	---
Local	---	---	---	---
Outlying areas	119.4	132.5	13.1	11.0
Federal	36.3	35.0	-1.3	-3.6
State	221.4	291.3	69.9	31.6
Local	---	---	---	---
American Samoa	---	18.3	18.3	100.0
Federal	---	20.8	20.8	100.0
State	---	16.7	16.7	100.0
Local	---	---	---	---
Canal Zone	---	---	---	---

See footnotes at end of table.

Table 22.--Ratio of enrollments to instructional staff in adult education at each level of governmental sponsorship, and change in ratio, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios, 1968-69 to 1969-70	
			Ratio	Percent
1	2	3	4	5
Guam	25.7	28.3	2.6	10.1
Federal	7.8	5.9	-1.9	-24.4
State	59.9	77.3	17.4	29.1
Local	---	---	---	---
Puerto Rico	126.8	142.3	15.5	12.2
Federal	38.5	36.4	-2.1	-5.5
State	231.1	310.5	79.4	34.4
Local	---	---	---	---
Trust Terr., Pac. Is.	15.0	22.1	7.1	47.3
Federal	19.5	29.8	10.3	52.8
State	---	19.0	19.0	100.0
Local	---	---	---	---
Virgin Islands	25.3	31.6	6.3	24.9
Federal	26.7	36.6	9.9	37.1
State	21.9	22.2	0.3	1.4
Local	---	---	---	---

[1] States are equally weighted; to obtain State average add column up and divide by 51.
[2] Staff included with State figures.

resources have taken place during a specified period of time. For example, figures in table 22 suggest that overall, in 1969-70, the ratio of enrollment to instructors increased and that most of this increase took place in the locally-sponsored programs, where enrollments increased much more rapidly than in the state- or federally-sponsored programs (compare table 10, column 9, with table 17, column 9) and at a rate which outdistanced the supply of instructors.

Secondly, and perhaps more importantly, changes in ratio can be used as signposts by the researcher to help him or her identify areas for further research. It is hoped that the ratios in this report will serve as a baseline when data gathered in the future is reviewed.

The 27 Selected Federal Programs

Data on ratios of enrollment-instructional staff for the 27 selected federal programs, presented in table 23 for 1968-69, include an average ratio for the nation of 39.9 and one for the average state of 32.2. Why the discrepancy? The figures do not match because they were computed differently: the national figure expresses the ratio of the total number of adult public education students divided by the total number of instructors of adult public education. On the other hand, the figure for the average state is arrived at by calculating a ratio for each state, adding those ratios together, and dividing by the number of states. It is clear, then, that the national figure is much more effected by large numbers than is the state figure. In fact, detailed data in table 23 show that several large states with programs involving proportionally many students and fewer instructors pushed the size of the national ratio up.

This example of how a national total can mask important aspects of what is really happening can be repeated at another level. It is possible to locate a further discrepancy by comparing the ratio of the average state (32.2) with that of the average program.

The figure for the average program can be computed from data not published in this report but gathered in this survey. These are the data on the operation of the 27 selected federal programs in the fifty states and the District which break down into separate line entries--one for each state's program. Since each state could have reported 27 figures, one for each of the 27 programs, it is logically possible that we would be working with 1,377 (27 x 51) entries. In fact, all 27 programs were not operating both years in all of the states, there were only a total of 375 such entries. (Only data from recurring entries were analyzed in this section to permit

Table 23.--Ratio of enrollments to instructional staff for the 27 selected federally sponsored adult education programs and change in ratio, by State or other area: United States, 1968-69 and 1969-70

State or other area	Ratio 1968-69	Ratio 1969-70	Change in ratios 1968-69 to 1969-70	
			Ratio	Percent
(1)	(2)	(3)	(4)	(5)
50 States and D.C.	**39.9**	**39.3**	**-0.6**	**-1.5**
State average	32.2	32.0	-0.2	-0.5
Alabama	44.9	43.8	-1.1	-2.5
Alaska	21.3	20.4	-0.9	-4.2
Arizona	23.9	18.7	-5.2	-21.8
Arkansas	14.0	14.3	0.3	2.1
California	64.5	69.1	4.6	7.1
Colorado	34.9	33.3	-1.6	-4.6
Connecticut	17.7	18.7	1.0	5.7
Delaware	37.2	36.7	-0.5	-1.3
District of Columbia	53.9	55.7	1.8	3.3
Florida	52.2	53.7	1.5	2.9
Georgia	37.7	41.6	3.9	10.3
Hawaii	32.4	31.7	-0.7	-2.2
Idaho	4.2	4.9	0.7	16.7
Illinois	21.1	23.6	2.5	11.3
Indiana	10.2	6.7	-3.5	-34.3
Iowa	20.5	19.7	-0.8	-3.9
Kansas	39.7	38.8	-0.9	-2.3
Kentucky	26.1	25.0	-1.1	-4.2
Louisiana	41.1	37.4	-3.7	-9.0
Maine	17.7	18.2	0.5	2.8
Maryland	21.7	23.3	1.6	7.4
Massachusetts	22.9	23.0	-0.1	-0.4
Michigan	47.3	46.3	-1.0	-2.1
Minnesota	36.1	37.1	1.0	2.8
Mississippi	34.9	39.0	4.1	11.8
Missouri	35.4	28.7	-6.7	-18.9
Montana	29.1	27.7	-1.4	-4.8
Nebraska	31.9	32.5	0.6	1.9
Nevada	22.8	24.8	2.0	8.8
New Hampshire	32.8	39.7	6.9	21.0
New Jersey	23.4	22.4	-1.0	-4.3
New Mexico	23.7	21.2	-2.5	-10.6
New York	86.0	85.3	-0.7	-0.8
North Carolina	33.9	27.7	-6.2	-18.3
North Dakota	34.6	28.3	-6.3	-18.2
Ohio	55.3	56.1	0.8	1.5
Oklahoma	19.4	19.3	-0.1	-0.5
Oregon	38.1	37.0	-1.1	-2.9
Pennsylvania	28.6	28.6	0.0	0.0
Rhode Island	26.3	21.7	-4.6	-17.5
South Carolina	24.1	22.9	-1.2	-5.0
South Dakota	36.6	48.3	11.7	32.0
Tennessee	21.8	22.3	0.5	2.3
Texas	41.0	43.1	2.1	5.1
Utah	22.3	22.4	0.1	0.5
Vermont	17.7	21.5	3.8	21.5
Virginia	34.0	33.4	-0.6	-1.8
Washington	47.4	40.5	-6.9	-14.6
West Virginia	20.4	20.7	0.3	1.5
Wisconsin	63.6	62.9	-0.7	-1.1
Wyoming	13.8	14.5	0.7	5.1
Outlying areas	**36.3**	**34.7**	**-1.6**	**4.4**
American Samoa	---	20.8	20.8	100.0
Canal Zone	---	---	---	---
Guam	7.8	5.9	-1.9	-24.4
Puerto Rico	38.5	36.4	-2.1	-5.5
Trust Terr., Pac. Is.	19.5	29.8	10.3	52.8
Virgin Islands	26.7	36.6	9.9	37.1

comparison of 1968-69 data with 1969-70.) There were therefore 375 ratios computed for each year. Taking only the average of these ratios for 1968-69, we arrive at the ratio 52.3, a number significantly larger than the ratio for the average state of 32.3. (The discrepancy finding was very similar for the school year 1969-70.)

Again, we must address the discrepancy. One possible explanation is this: when data on several large programs involving many teachers teaching a relatively few number of students are included in the calculation of the ratio for the average state, these data bring the ratio of several states down and so bring the ratio of the average state down as well. These same programs have much less impact on the ratio for the average program because the same data are converted to ratios of smaller units (a program within a state) and because there are a greater number of ratios (375) to be added to calculate the average.

Earlier we had found that the national ratio--calculated by dividing the total number of students by the total number of instructional staff--was larger (39.9) than the average state ratio (32.2) because the populous states had weighted the result; the ratios of larger states tended to be higher than smaller states (note in particular California and New York). When ratios of the federal programs are counted as separate units, the average program ratio can reflect the weighting of the populous states. There may be, then, proportionally more units (among the 375 recurring programs) with high ratios than when only the 51 units for the states and the District are considered. In any case, it is probable that a person in the nation participating in one of the 27 select federal programs confronts a student-instructor ratio that is smaller than the ratio for the average program.

The differences between the national total, and state and program average ratios are particularly interesting because they provide a powerful example of the principle that different base-line data lead the data analyst to quite different figures, which nevertheless can generally be said to describe the same condition, i.e., the ratio of enrollment to instructional staff in the United States public adult education programs. Those who choose to believe that statistics "can be used to prove anything" would find apparent proof for their claim here. But, as the previous discussion has tried to show, each of the ratios is accurate and meaningful; the existence of discrepancies between them simply highlights the fact that they cannot be used interchangeably and that their specific contexts must be kept in mind by the adult educator who refers to them. It would not make sense, for example, for a person interested in getting a sense of the ratio of students to teachers for the twenty-seven select federal programs in the entire country in 1968-69 to use the ratio, 52.3, without providing the basis for the number.

The Four U.S. Office of Education Programs

The individuality of the programs is further revealed in table 24 which presents the enrollment-instructional ratios for the four Office of Education programs. The data, recorded by state, indicate that across the nation, the number of instructors increased in relation to a set number of enrollees in three out of the four programs. The Adult Basic Education program is the exception.

Table 24.--Ratio of enrollments to instructional staff, 1968-69, and change in ratio, 1969-70 for four OE-sponsored adult education programs, by State or other area: United States, 1968-69 and 1969-70

State or other area	Adult basic education			Adult vocational education			Civil defense adult education			Manpower development and training		
	Ratio 1968-69	Ratio change		Ratio 1968-69	Ratio change		Ratio 1968-69	Ratio change		Ratio 1968-69	Ratio change	
		Ratio 1969-70	Percent		Ratio 1969-70	Percent		Ratio 1969-70	Percent		Ratio 1969-70	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
50 States and D.C.	**21.6**	**1.4**	**6.5**	**39.8**	**-1.4**	**-3.5**	**33.6**	**-2.6**	**-7.7**	**20.0**	**-1.0**	**-5.0**
State average	23.8	6.3	5.6	32.8	0.1	0.4	77.5	6.1	3.0	22.6	0.2	0.2
Alabama	16.8	-0.2	-1.2	44.7	4.3	9.6	20.1	10.4	51.7	48.7	-9.8	-20.1
Alaska	50.7	-23.1	-45.6	28.0	2.1	7.5	15.4	0.0	0.0	17.7	-0.8	-4.5
Arizona	20.0	9.5	47.5	23.3	-7.0	-30.0	---	---	---	34.1	-5.5	-16.1
Arkansas	13.7	0.4	2.9	---	---	---	---	---	---	---	---	---
California	57.4	3.7	6.5	76.0	7.1	9.3	190.0	16.0	8.4	20.0	-5.8	-29.0
Colorado	14.8	-0.6	-4.1	87.1	-2.7	-3.1	10.7	-1.0	-9.4	50.0	46.2	92.4
Connecticut	20.5	1.2	5.9	19.8	0.1	0.5	10.3	-18.6	-180.6	10.0	-2.0	-20.0
Delaware	14.5	2.5	17.2	47.4	-0.1	-0.2	74.0	-15.9	-21.5	16.7	-2.9	-17.4
Dist. of Columbia	128.7	0.0	0.0	33.4	-0.9	-2.7	17.3	36.7	212.1	36.9	-0.7	-1.9
Florida	30.9	1.0	3.2	55.0	1.7	3.1	90.4	9.6	10.6	22.9	3.6	15.7

Table 24.--Ratio of enrollments to instructional staff, 1968-69, and change in ratio, 1969-70 for four OE-sponsored adult education programs, by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area	Adult basic education			Adult vocational education			Civil defense adult education			Manpower development and training		
	Ratio 1968-69	Ratio change		Ratio 1968-69	Ratio change		Ratio 1968-69	Ratio change		Ratio 1968-69	Ratio change	
		Ratio 1969-70	Percent		Ratio 1969-70	Percent		Ratio 1969-70	Percent		Ratio 1969-70	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Georgia	19.2	0.6	3.1	42.1	6.1	14.5	1,857.7	497.0	26.8	29.1	1.0	3.4
Hawaii	29.9	-1.0	-3.3	40.1	-0.3	-0.8	94.5	9.5	10.1	40.3	18.4	45.7
Idaho	20.6	0.6	2.9	---	---	---	7.1	20.7	291.6	---	---	---
Illinois	20.2	-0.2	-1.0	37.3	0.0	0.0	26.1	0.0	0.0	15.0	0.0	0.0
Indiana	20.8	-1.6	-7.7	3.9	-1.9	-48.7	28.3	-23.2	-82.0	28.0	-4.1	-14.6
Iowa	10.1	0.9	8.9	14.4	0.6	4.2	100.1	-48.6	-48.6	33.6	-5.9	-17.6
Kansas	17.0	1.6	9.4	28.2	-3.6	-12.8	58.9	-33.3	-56.5	29.3	4.0	13.7
Kentucky	20.6	2.9	14.1	27.1	-5.1	-18.8	---	---	---	29.8	-1.1	-3.7
Louisiana	19.5	3.2	16.4	56.9	-10.3	-18.1	167.4	84.6	50.5	26.6	-1.3	-4.9
Maine	10.9	-0.4	-3.7	16.9	4.1	24.3	68.4	-14.8	-21.6	19.0	-1.0	-5.3
Maryland	14.0	2.8	20.0	22.9	0.7	3.1	---	---	---	29.8	25.1	84.2
Massachusetts	32.4	-0.4	-1.2	20.0	0.0	0.0	44.3	7.6	17.2	11.8	-0.6	-5.1
Michigan	24.7	-0.9	-3.6	57.8	-5.4	-9.3	---	---	---	12.6	0.1	0.8
Minnesota	20.4	5.7	27.9	44.4	0.2	0.5	28.1	-8.5	-30.3	20.4	-9.6	-47.1
Mississippi	31.3	-0.8	-2.6	44.3	2.1	4.7	21.2	-9.8	-46.2	26.5	1.5	5.7
Missouri	26.1	-0.2	-0.8	40.5	-8.1	-20.0	14.6	-0.6	-4.1	24.7	-0.7	-2.8
Montana	21.3	-3.7	-17.3	28.3	-1.2	-4.2	29.5	12.8	43.4	15.0	0.0	0.0
Nebraska	36.3	-1.3	-3.6	20.3	-0.8	-3.9	27.0	-2.0	-7.4	23.2	-0.3	-1.3
Nevada	22.1	3.7	16.7	22.8	1.0	4.4	35.0	5.6	16.0	19.9	-0.2	-1.0
New Hampshire	13.8	3.6	26.1	54.4	10.6	19.5	5.1	5.4	105.9	23.7	4.1	17.3
New Jersey	20.5	0.2	1.0	24.7	5.2	21.1	42.8	-11.6	-27.1	15.8	-2.3	-14.5
New Mexico	23.2	-4.7	-20.3	29.2	0.6	2.1	---	---	---	---	---	---
New York	13.7	0.2	1.5	9.4	-0.1	-1.1	8.0	-0.1	-1.3	21.2	-2.8	-13.2
North Carolina	33.0	-7.1	-21.5	35.4	-6.7	-18.9	36.4	-17.5	-48.1	12.5	1.2	9.6
North Dakota	10.3	-1.0	-9.8	62.2	0.2	0.3	27.7	-8.5	-30.7	28.6	5.6	19.6
Ohio	20.2	0.9	4.5	60.7	2.2	3.6	---	---	---	12.1	-0.4	-3.3
Oklahoma	13.6	0.5	3.7	22.2	-0.6	-2.7	43.0	24.5	57.0	20.7	-0.6	-2.9
Oregon	26.1	3.4	13.0	25.6	0.0	0.0	24.5	-10.8	-44.1	22.1	0.7	3.2
Pennsylvania	17.7	-0.4	-2.3	31.8	0.0	0.0	---	---	---	34.9	-2.0	-5.7
Rhode Island	23.7	-0.4	-1.7	24.0	-2.6	-10.8	23.2	0.5	2.2	55.8	-41.3	-74.0
South Carolina	21.9	-0.1	-0.5	---	---	---	195.5	-91.1	-46.6	25.0	-0.6	-2.4
South Dakota	15.1	2.2	14.6	23.5	21.7	92.3	48.8	-34.6	-70.9	30.8	-3.6	-11.7
Tennessee	16.0	0.7	4.4	31.1	-2.2	-7.1	46.8	-6.8	-14.5	13.0	4.5	34.6
Texas	20.3	7.4	36.5	62.9	0.3	0.5	23.8	-1.8	-7.6	20.0	0.0	0.0
Utah	14.7	-2.8	-19.1	27.7	-0.1	-0.4	14.3	-6.9	-48.3	---	---	---
Vermont	17.1	2.0	11.7	17.3	5.3	30.6	28.1	55.8	198.6	17.2	-2.3	-13.4
Virginia	18.9	0.4	2.1	36.8	-0.2	-0.5	46.5	-18.5	-39.8	41.1	1.7	4.1
Washington	23.4	6.7	28.6	45.8	-9.4	-20.5	223.1	-99.5	-44.6	15.5	-0.5	-3.2
West Virginia	35.2	0.5	1.4	20.5	0.0	0.0	32.0	0.0	0.0	10.6	-0.4	-3.8
Wisconsin	11.6	7.4	63.8	33.0	-1.0	-3.0	25.1	0.5	2.0	34.1	-0.6	-1.8
Wyoming	16.4	6.4	39.0	16.9	0.4	2.4	20.5	-4.2	-20.5	6.5	0.0	0.0
Outlying areas	**29.3**	**-8.3**	**-28.3**	**45.5**	**17.7**	**38.9**	**165.8**	**-127.0**	**-76.6**	**13.4**	**0.6**	**4.5**
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Canal Zone	---	---	---	---	---	---	---	---	---	---	---	---
Guam	9.9	-2.5	-25.3	3.9	-0.5	-12.8	---	---	---	10.2	-0.8	-7.8
Puerto Rico	30.7	-9.4	-30.6	47.7	18.9	39.6	165.8	-127.1	-76.6	13.4	0.1	0.8
Trust Terri., Pac. Is.	---	---	---	---	---	---	---	---	---	19.5	1.2	6.2
Virgin Islands	33.8	3.7	11.0	---	---	---	---	---	---	10.3	15.9	154.4

Community Colleges and Junior Colleges

Table 25 shows ratios of enrollment to instructional staff in the public community and junior colleges arranged by level of governmental sponsorship of the programs. Comparing these ratios with the ratios in table 22, which are for all of public adult education, we see that for the 50 states and D.C. during both 1968-69 and 1969-70, there were in almost all cases fewer students per instructor enrolled at each governmental level in courses offered in the community and junior colleges than for all public adult education (columns 2 and 3 in both tables). Moreover, changes in the ratios (columns 4 and 5) indicate that there was a greater likelihood for public community and junior colleges to have fewer students per instructor from one year to the next than for all of public adult education.

Table 25.--Ratio of enrollments to instructional staff in adult education in community and junior colleges at each level of governmental sponsorship, and change in ratio by State or other area: United States, 1968-69 and 1969-70

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios	
			Ratio	Percent
1	2	3	4	5
50 States and D.C.	33.2	31.5	-1.7	-5.1
Federal	37.7	34.1	-3.6	-9.6
State	26.4	26.9	0.5	1.9
Local	27.4	28.5	1.1	4.0
Alabama	50.5	53.7	3.2	6.3
Federal	---	---	---	---
State	50.5	53.7	3.2	6.3
Local	---	---	---	---
Alaska	---	---	---	---
Arizona	32.2	23.6	-8.6	-26.7
Federal	32.3	22.4	-10.2	-31.5
State	18.0	13.3	-5.0	-27.9
Local	33.9	33.7	-0.2	-0.6
Arkansas	---	---	---	---
California	35.9	37.3	1.4	3.9
Federal	---	---	---	---
State	---	---	---	---
Local	35.9	37.3	1.4	3.9
Colorado	---	---	---	---
Connecticut	18.3	18.6	0.3	1.6
Federal	---	---	---	---
State	18.3	18.6	0.3	1.6
Local	---	---	---	---
Delaware	---	---	---	---
District of Columbia	---	---	---	---
Florida	28.5	29.3	0.8	2.8
Federal	42.3	45.1	2.8	6.6
State	---	---	---	---
Local	22.7	23.0	0.3	1.3
Georgia	41.7	47.2	5.5	13.2
Federal	41.7	47.2	5.5	13.2
State	---	---	---	---
Local	---	---	---	---

Table 25.--Ratio of enrollments to instructional staff in adult education in community and junior colleges at each level of governmental sponsorship, and change in ratio by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios	
			Ratio	Percent
1	2	3	4	5
Hawaii	---	---	---	---
Idaho	---	---	---	---
Illinois	---	---	---	---
Indiana	---	---	---	---
Iowa	24.4	24.0	-0.4	-1.6
Federal	20.4	19.7	-0.7	-3.4
State	30.4	30.1	-0.3	-1.0
Local	---	---	---	---
Kansas	---	---	---	---
Kentucky	---	---	---	---
Louisiana	---	---	---	---
Maine	---	---	---	---
Maryland	26.0	28.5	2.5	9.6
Federal	28.8	19.2	-9.6	-33.3
State	24.1	26.9	2.8	11.6
Local	28.1	44.6	16.5	58.7
Massachusetts	40.0	40.0	0.0	0.0
Federal	40.0	40.0	0.0	0.0
State	---	---	---	---
Local	---	---	---	---
Michigan	---	---	---	---
Minnesota	---	---	---	---
Mississippi	---	---	---	---
Missouri	16.2	16.0	-0.2	-1.2
Federal	---	---	---	---
State	---	---	---	---
Local	16.2	16.0	-0.2	-1.2
Montana	16.4	15.1	-1.3	-7.9
Federal	48.3	14.7	-33.6	-69.6
State	---	---	---	---
Local	15.1	15.1	0.0	0.0
Nebraska	20.1	19.6	-0.5	-2.5
Federal	---	---	---	---
State	---	---	---	---
Local	20.1	19.6	-0.5	-2.5
Nevada	---	---	---	---

Table 25.–Ratio of enrollments to instructional staff in adult education in community and junior colleges at each level of governmental sponsorship, and change in ratio by State or other area: United States, 1968-69 and 1969-70—Continued

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios	
			Ratio	Percent
1	2	3	4	5
New Hampshire	---	---	---	---
New Jersey	---	---	---	---
New Mexico	21.0	22.5	1.5	7.1
Federal	---	---	---	---
State	21.0	22.5	1.5	7.1
Local	---	---	---	---
New York	19.2	19.3	0.1	0.5
Federal	8.0	7.7	–0.3	–3.8
State	19.9	20.0	0.1	0.5
Local	20.0	20.0	0.0	0.0
North Carolina	33.8	28.1	–5.7	–16.9
Federal	33.9	27.7	–6.2	–18.3
State	31.6	40.3	8.7	27.5
Local	---	---	---	---
North Dakota	---	---	---	---
Ohio	---	---	---	---
Oklahoma	---	---	---	---
Oregon	30.5	30.4	–0.1	–0.3
Federal	38.1	37.0	–1.1	–2.9
State	21.8	23.1	1.3	6.0
Local	20.1	19.9	–0.2	–1.0
Pennsylvania	19.5	20.1	0.6	3.1
Federal	5.0	8.8	3.8	76.0
State	20.7	19.6	–1.1	–5.3
Local	23.9	26.7	2.8	11.7
Rhode Island	---	---	---	---
South Carolina	---	---	---	---
South Dakota	---	---	---	---
Tenessee	12.5	14.6	2.1	16.8
Federal	---	---	---	---
State	12.5	14.6	2.1	16.8
Local	---	---	---	---
Texas	---	---	---	---
Utah	---	---	---	---
Vermont	---	---	---	---
Virginia	---	---	---	---

Table 25.--Ratio of enrollments to instructional staff in adult education in community and junior colleges at each level of governmental sponsorship, and change in ratio by State or other area: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Ratio 1968-69	Ratio 1969-70	Change in ratios	
			Ratio	Percent
1	2	3	4	5
Washington	47.0	40.9	-6.1	-13.0
Federal	46.9	40.0	-6.9	-14.7
State	97.7	98.7	1.0	1.0
Local	43.8	44.0	0.2	0.5
West Virginia	---	---	---	---
Wisconsin	---	---	---	---
Wyoming	---	---	---	---
Outlying area	---	18.3	18.3	100.0
Federal	---	20.8	20.8	100.0
State	---	16.7	16.7	100.0
Local	---	---	---	---
American Samoa	---	18.3	18.3	100.0
Federal	---	20.8	20.8	100.0
State	---	16.7	16.7	100.0
Local	---	---	---	---
Canal Zone	---	---	---	---
Guam	---	---	---	---
Puerto Rico	---	---	---	---
Trust Terr., Pac. Is.	---	---	---	---
Virgin Islands	---	---	---	---

Analyzing Changes in Ratios

Table 26 is the first table in this report to present analyzed data. The question asked was: which state underwent the greatest percentage change in enrollments and in instructional staff and in the enrollment/instructional staff ratio between 1968-69 and 1969-70? To answer the question, each state was ranked according to the size of the percentage change it showed in each of these three areas. In ranking, the largest percentage increase was ranked "1," while the minus percentage changes were placed below the smallest positive change, with the largest minus value ranked, "51." If two or more states had the same percentage increase or decrease, they were assigned the same ranking. Since the total number of rankings had to equal the number of states, their shared ranking was computed as the midpoint between the next highest and lowest ranking. This analysis was done with numbers which included figures from each level of government sponsorship: federal, state and local. (For those not familiar with the process, there is a more detailed description of the ranking procedure on pp. 29-30 of this report in the section on, "Statistical Indices.")

The percentage change in ratio is a useful figure because it tells the analyst about growth in enrollment and growth in instructional staff *in relation to each other.* The percentage change in ratio is not a simple indicator of growth; if both the enrollment and instructional staff in a particular state are growing at roughly the same rate, then that state's ratio will not change. In table 26 the state of Montana provides a clear example of this kind of situation. This state with the same percentage changes (-2.0 and -2.0) is ranked 46th in percentage increase in instructional staff and 46th in rate of enrollment growth; thus its percentage change in ratio was 0.0.

Because greater absolute differences in values exist at the extremes of a normal distribution of numbers, smaller

Table 26.–Enrollment, instructional staff, and ratio of enrollment to instructional staff for adult education in the public education system, in numbers, percent change, and rank for increase, by State: United States, 1968-69 and 1969-70

State	Enrollment			Instructional Staff			Ratio of enrollment to instructional staff		
	Number in 1968-69	Percent change 1969-70	Rank[1] for increase	Number in 1968-69	Percent change 1969-70	Rank[1] for increase	Number in 1968-69	Percent change 1969-70	Rank[1] for increase
1	2	3	4	5	6	7	8	9	10
50 States and D.C.	**8,346,828**	**10.8**	---	**229,361**	**9.2**	---	**36.4**	**1.4**	---
State average	163,663.3	11.1	---	4,497.3	10.3	---	31.6	1.8	---
Alabama	159,601	5.2	35	3,555	7.7	25	44.9	−2.2	37
Alaska	10,246	34.5	5	491	73.5	1	20.9	−22.5	51
Arizona	35,427	3.4	38	1,460	32.5	6	24.3	−22.2	50
Arkansas	8,672	10.3	21	587	7.8	24	14.8	2.0	20
California	1,076,678	12.0	19	16,599	9.8	19	64.9	1.9	21
Colorado	82,916	0.2	43	2,368	4.9	32	35.0	−4.6	41
Connecticut	99,026	6.0	30	3,506	3.8	33	28.2	2.5	17½
Delaware	27,914	−12.2	50	860	0.6	36½	32.5	−12.6	45
Dist. of Columbia	22,991	−3.1	47	424	−1.4	44	54.2	−1.7	35
Florida	579,309	7.9	26	12,878	6.5	28	45.0	1.3	24
Georgia	152,666	−1.5	45	4,066	−10.9	50	37.6	10.4	9
Hawaii	29,016	16.7	14	949	13.0	13	30.6	3.3	14½
Idaho	2,848	29.7	7	681	11.6	16½	4.2	16.7	7
Illinois	304,173	19.6	13	11,720	18.8	11	26.0	0.4	26½
Indiana	95,572	−8.6	48	3,650	2.7	34	26.2	−11.1	44
Iowa	197,412	40.9	3	5,201	−0.6	41	38.0	41.6	1
Kansas	44,955	12.1	18	1,112	−8.6	49	40.4	22.8	4
Kentucky	32,754	15.4	16	1,255	20.3	8	26.1	−4.2	40
Louisiana	80,714	5.3	33½	2,089	13.8	12	38.6	−7.3	43
Maine	22,634	23.1	9	1,278	12.1	15	17.7	10.2	10
Maryland	164,578	9.4	24½	4,682	6.7	27	35.2	2.6	16
Massachusetts	92,253	4.1	37	3,779	8.1	23	24.4	−3.7	38
Michigan	134,907	33.7	6	2,850	36.7	4	47.3	−2.1	36
Minnesota	271,420	0.5	42	5,924	−1.1	43	45.8	1.8	22
Mississippi	65,096	9.8	22	1,868	−1.8	45	34.9	11.8	8
Missouri	93,797	22.1	10	4,646	23.7	7	20.2	−1.5	34
Montana	23,330	−2.0	46	1,110	−2.0	46	21.0	0.0	28½
Nebraska	112,049	7.4	28	3,939	5.1	30½	28.5	2.1	19
Nevada	12,348	2.4	40	541	−5.7	48	22.8	8.8	11
New Hampshire	24,740	−9.8	49	906	−22.7	51	27.3	16.9	6
New Jersey	457,834	51.0	1	20,771	8.4	22	22.0	39.6	2
New Mexico	10,440	39.9	4	567	35.8	5	18.4	3.3	14½
New York	1,011,971	5.7	31½	32,629	11.2	18	31.0	−4.8	42
North Carolina	177,428	16.4	15	5,251	40.2	3	33.8	−16.9	48
North Dakota	7,566	6.7	29	219	19.2	10	34.6	−21.7	49
Ohio	321,963	7.8	27	8,012	6.9	26	40.2	0.8	25
Oklahoma	32,878	10.8	20	1,696	11.6	16½	19.4	−0.5	32
Oregon	158,281	9.4	24½	5,198	9.7	20½	30.5	−0.3	30½
Pennsylvania	275,006	5.1	36	7,346	5.4	29	37.4	−0.3	30½
Rhode Island	30,109	20.4	12	880	12.2	14	34.2	7.3	12
South Carolina	39,045	41.4	2	1,374	66.4	2	28.4	−14.8	47
South Dakota	23,960	27.4	8	852	0.2	38	28.1	27.4	3
Tennessee	65,369	5.7	31½	2,625	5.1	30½	24.9	0.4	26½
Texas	344,242	2.9	39	8,475	0.6	36½	40.6	2.5	17½
Utah	62,225	14.4	17	2,488	19.3	9	25.0	−4.0	39

See footnote at end of table.

Table 26.--Enrollment, instructional staff, and ratio of enrollment to instructional staff for adult education in the public education system, in numbers, percent change, and rank for increase, by State: United States, 1968-69 and 1969-70—Continued

State	Enrollment			Instructional Staff			Ratio of enrollment to instructional staff		
	Number in 1968-69	Percent change 1969-70	Rank[1] for increase	Number in 1968-69	Percent change 1969-70	Rank[1] for increase	Number in 1968-69	Percent change 1969-70	Rank[1] for increase
1	2	3	4	5	6	7	8	9	10
Vermont	6,277	21.1	11	354	−0.3	40	17.7	21.5	5
Virginia	217,369	1.3	41	6,043	1.9	35	36.0	−0.6	33
Washington	315,031	−13.9	51	6,697	−0.9	42	47.0	−13.0	46
West Virginia	74,367	−1.4	44	3,654	−2.9	47	20.4	1.5	23
Wisconsin	653,032	9.7	23	9,082	9.7	20½	71.9	0.0	28½
Wyoming	2,393	5.3	33½	174	0.0	39	13.8	5.1	13

[1] Highest number is given first rank (1); lowest number (or largest minus number) is given lowest rank (51). Rankings do not indicate approval or disapproval but provide a means for comparison. This footnote will not be repeated in following tables where ranks may also be employed.

differences in values in the middle of distributions affect rankings more than at extremes, and because there was, on the average, a greater percentage increase in enrollments than in instructional staff (11.1 versus 10.3), this simple pattern, apparent for Montana, will not necessarily be repeated in rankings for other states. (For example, see Wisconsin which has the same percentage changes [both 9.7] but rankings of 23 and 20½.) The ranking of 28½ of Montana for its percentage change in ratio of 0.0 (and for Wisconsin, too), on the other hand, is slightly above the midpoint of 26 and about what we might expect, given the somewhat higher percentage increase in enrollments than in instructional staff which took place across the country between 1968-69 and 1969-70. Overall, this tended to push ratios up in 1969-70; in that year the number of states with increased ratios exceeded the number of states with decreased ratios by two.

Matrix aa below presents three rank-difference correlations which should help the reader in understanding the significance of the rankings given in table 26. A matrix is a kind of table which has a particular logic of organization: by its design a matrix puts each element of a table in relation to every other element. For example, in matrix aa below, two elements placed in relation are the two variables used in calculating a Spearman rank-difference correlation. This is done for all possible combinations of pairs of elements or variables.

Matrix aa
Rank-difference Correlations for Table 26

	Enrollment change 1968-69 to 1969-70	Instructional staff change 1968-69 to 1969-70	Ratio of enrollment to staff change 1968-69 to 1969-70
Enrollment change 1968-69 to 1969-70	---	---	---
Instructional staff change from 1968-69 to 1969-70	+.62	---	---
Ratio of enrollment to staff change from 1968-69 to 1969-70	+.27	−.49	---

In matrix aa above each variable has been listed as a row element and a column element. Since this procedure leads to many duplications in intersections of variables, it will not be repeated in later matrices.

A rank-difference correlation is a numerical expression of the degree of relationship between two variables for a sample of cases. The cases in this study are the 50 states and D.C.; thus errors of sampling are absent and the correlations should be more accurate since we use the total universe as sample.

The extent of the correlation between particular variables for the states can reassure us on the accuracy of the data when high correlations can be expected, e.g., between enrollments and instructors or enrollments and secondary children in the state. When moderate or high correlations occur (see page 107), those states with markedly different rankings on the variable must be looked at carefully in an effort to account for the discrepancies from the general pattern.

Although the situation of a low correlation across all the states helps us little in pinpointing states whose rankings may be divergent (since most of the states will have divergent rankings), calculating a correlation in such a situation can be valuable for revealing heretofore unknown factors. For instance, if there were a low positive correlation between an experimental drug and cancer cure that fact would be of immense value. Also, the value of a correlation may not be so much apparent now as later when changes in direction and magnitude have been noted over the years. For these reasons the present report includes a variety of rank-difference correlations for various pairs of variables.

In matrix aa the correlation between the percent of enrollment change and the percent of staff change (for the two year period) of +.62 is marked but not very high. Reason would suggest that changes in number of students and staff should have kept better pace than this. Even so, a brief examination of table 26 singles out Iowa's data for interpretation by those who know the circumstances. That state ranked third in percentage increase in enrollments of 40.9 percent but 41 for percentage change for staff with a decrease of 0.6 percent; in no way does Iowa fit the overall pattern of a +.62 correlation for changes in these variables.

The other two correlations in matrix aa can be interpreted to suggest that instructional staff increases have a greater impact on the ratio than enrollment changes. As the percentage of staff increased the size of the ratio decreased as evident with the correlation of −.49; on the other hand, enrollment increases and ratio size were positively correlated with only +.27.

DATA ON THE PURPOSES OF THE PROGRAM

After identifying the adult education programs and providing the enrollment and instructional staff statistics for 1968-69 and 1969-70 on OE-2323, the coordinator for each state's report was asked to indicate the purpose of each program or line entry about which he had already provided data. The form offered each coordinator a choice of five purposes or categories of types of programs:

1) basic education (including courses normally taught in elementary school through the 8th grade in the areas of reading, writing and arithmetic plus social skills and Americanization programs for immigrants);
2) high school education (including courses normally taught from 9th through 12th grade to students seeking a high school diploma or the equivalent General Education Development certificate);
3) vocational education (including courses offered to prepare for or advance in a job);
4) general or college education (including non-credit courses); and
5) other (including courses in recreational areas).

The coordinator was asked to indicate the primary purpose of each program or programs about which he had earlier provided a line of data by placing a star next to the appropriate category or categories. He was also asked to check off any of the remaining categories which he felt were also descriptive of the program(s). Although some coordinators did not provide descriptions of purposes for every line entry, there was no state that did not submit data on purposes of programs. Also, it is interesting to note the kinds of programs which were placed in the catch-all fifth category of "other": among those specified were programs in first aid, water safety, personal enrichment, community awareness, drug abuse, parent education, arts and crafts for senior citizens, staff training for government, medical training for lawmen, homemaking and tutoring.

The stars and checks system is a system for rating programs; the data that resulted from asking personnel to indicate the primary purpose and secondary purpose(s) of each program or line entry can therefore be called ratings.

There are a few other facts to be shared regarding the nature of the data on purposes. Some states had more than one individual doing the rating; line entries varied in enrollment and staff numbers; nor were all the ratings done with equal completeness. Nevertheless, the data give a useful index of the perceived relative purposes of each state's programs.

The Relative Ratings for the Five Purposes for Programs

The data are summarized in table 27. This table shows how many programs were linked by the coordinator with each of the five purposes or descriptive categories as serving one of those purposes either primarily or secondarily. The data are divided by state and, within each state, by level of governmental sponsorship of each program. There are also data on the total number of programs or line entries sponsored by the three levels of government in each state and outlying area.

Because the coordinator was permitted to indicate only one primary purpose per program, we find in examining the summary data in table 27 that the total number of primary ratings given for all five descriptive categories cannot exceed the total number of line entries made for this survey. For the same reason the percentage of programs receiving a primary rating under the descriptive categories at each governmental level cannot exceed 100 percent. Secondary ratings are a different matter. Since a coordinator could judge that a single program or line entry had as many as four secondary purposes, the total percentage of programs for the descriptive categories receiving a secondary rating could easily exceed 100 percent.

The data in table 27 are analyzed in table 28. Data on ratings for programs in outlying areas, which supplements table 27, are presented on page 99.

Table 27.--Description of adult education programs in number of ratings for primary and secondary purposes, at each level of governmental sponsorship for each State or other area and for the Nation, and percents that primary and secondary ratings are of the options available for ratings for the Nation: United States, 1968-69 and 1969-70

Table 18.--Description of adult education programs in number of ratings for primary and secondary purposes, at each level of governmental sponsorship for each State or other area and for the Nation, and percents that primary and secondary ratings are of the options available for ratings for the Nation: United States, 1968-69 and 1969-70

State or other area and level of governmental sponsorship of adult education	Options 1/	Ratings describing programs 2/									
		Basic education		High school or GED		Occupational training		General and college subjects		Other	
		Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
1	2	3	4	5	6	7	8	9	10	11	12
50 States and D.C., No	886	124	172	86	212	290	185	143	110	48	34
Percent 3/	-	14.0	19.4	9.7	23.9	32.7	20.9	16.1	12.4	5.4	3.8
Federal, number	453	98	126	23	140	169	84	30	68	24	12
Percent 3/	-	21.6	27.8	5.1	30.9	37.3	18.5	6.6	15.0	5.3	2.6
State, number	191	13	28	31	28	54	54	31	16	4	10
Percent 3/	-	6.8	14.7	16.2	14.7	28.3	28.3	16.2	8.4	2.1	5.2
Local, number	242	13	18	32	44	67	47	82	26	20	12
Percent 3/	-	5.4	7.4	13.2	18.2	27.7	19.4	33.9	10.7	8.3	5.0
Alabama	11	1	5	-	7	3	4	1	1	-	-
Federal	10	1	5	-	7	3	4	-	1	-	-
State	1	-	-	-	-	-	-	1	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Alaska	53	7	6	2	16	22	18	3	2	2	16
Federal	16	5	4	1	6	9	2	1	2	1	2
State	17	-	-	-	-	1	13	1	-	-	5
Local	20	2	2	1	10	12	3	1	-	1	9
Arizona	23	4	4	1	5	14	2	6	1	-	-
Federal	9	3	2	-	5	7	2	1	1	-	-
State	6	-	1	1	-	5	-	-	-	-	-
Local	8	1	1	-	-	2	-	5	-	-	-
Arkansas	6	2	3	1	4	-	1	-	-	-	-
Federal	5	2	3	-	4	-	1	-	-	-	-
State	1	-	-	1	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
California	37	2	19	1	18	4	22	12	4	-	-
Federal	5	1	3	-	2	2	1	1	-	-	-
State	16	-	16	-	16	-	16	-	-	-	-
Local	16	1	-	1	-	2	5	11	4	-	-
Colorado	22	3	5	1	6	13	2	3	5	-	-
Federal	21	2	5	1	5	13	1	3	5	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	1	1	-	-	1	-	1	-	-	-	-
Connecticut	9	1	1	-	1	4	2	2	1	-	-
Federal	6	1	-	-	-	4	-	1	-	-	-
State	3	-	1	-	1	-	2	1	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Delaware	25	2	1	1	2	5	2	1	2	-	1
Federal	9	2	1	-	1	4	1	1	1	-	1
State	4	-	-	1	1	1	1	-	1	-	-
Local	12	-	-	-	-	-	-	-	-	-	-
District of Columbia	9	4	-	1	2	1	4	-	1	-	-
Federal	7	3	-	-	2	1	2	-	-	-	-
State	2	1	-	1	-	-	2	-	1	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Florida	22	3	6	2	6	10	5	3	6	3	1
Federal	17	3	4	-	6	9	4	3	5	1	1
State	2	-	2	2	-	-	1	-	-	-	-
Local	3	-	-	-	-	1	-	-	1	2	-
Georgia	8	2	6	-	3	2	6	-	-	-	-
Federal	8	2	6	-	3	2	6	-	-	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Hawaii	8	6	2	6	2	-	-	1	-	3	-
Federal	14	5	2	5	2	-	-	-	-	2	-
State	4	1	-	1	-	-	-	1	-	1	-
Local	-	-	-	-	-	-	-	-	-	-	-
Idaho	3	1	-	-	-	1	-	1	-	-	-
Federal	3	1	-	-	-	1	-	1	-	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Illinois	11	2	1	2	1	1	2	2	-	2	-
Federal	6	2	1	-	1	1	2	-	-	1	-
State	4	-	-	2	-	-	-	1	-	1	-
Local	1	-	-	-	-	-	-	1	-	-	-

Table 27.--Description of adult education programs in number of ratings for primary and secondary purposes, at each level of governmental sponsorship for each State or other area and for the Nation, and percents that primary and secondary ratings are of the options available for ratings for the Nation: United States, 1968-69 and 1969-70--Continued

Table 18.--Description of adult education programs in number of ratings for primary and secondary purposes, at each level of governmental sponsorship for each State or other area and for the Nation, and percents that primary and secondary ratings are of the options available for ratings for the Nation: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Options 1/	Ratings describing programs 2/									
		Basic education		High school or GED		Occupational training		General and college subjects		Other	
		Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
1	2	3	4	5	6	7	8	9	10	11	12
Indiana	10	3	1	1	2	2	2	1	2	-	-
Federal	8	3	1	-	2	2	2	1	2	-	-
State	2	-	-	1	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Iowa	32	1	7	1	7	6	3	17	6	5	2
Federal	10	1	6	-	6	5	2	-	5	2	2
State	18	-	-	1	-	1	-	16	-	-	-
Local	4	-	1	-	1	-	1	1	1	3	-
Kansas	26	2	-	-	2	10	1	-	-	1	-
Federal	7	2	-	-	2	-	1	-	-	-	-
State	19	-	-	-	-	[illegible]	-	-	-	1	-
Local	-	-	-	-	-	-	-	-	-	-	-
Kentucky	5	1	2	-	3	1	1	-	-	-	-
Federal	5	1	2	-	3	1	1	-	-	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Louisiana	10	1	3	1	2	2	1	-	-	2	1
Federal	9	1	3	-	2	2	1	-	-	2	1
State	1	-	-	1	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Maine	5	1	1	-	2	-	1	-	2	-	-
Federal	4	1	1	-	1	-	1	-	1	-	-
State	1	-	-	-	1	-	-	-	1	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Maryland	42	1	5	4	21	18	8	5	16	-	-
Federal	22	1	2	1	10	13	1	-	2	-	-
State	10	-	2	2	6	4	4	2	8	-	-
Local	10	-	1	1	5	1	3	3	6	-	-
Massachusetts	15	3	3	1	3	9	1	1	-	1	3
Federal	5	2	1	-	2	2	-	-	-	1	-
State	10	1	2	1	1	7	1	1	-	-	3
Local	-	-	-	-	-	-	-	-	-	-	-
Michigan	5	1	2	-	2	3	-	-	1	-	-
Federal	5	1	2	-	2	3	-	-	1	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Minnesota	10	1	5	1	5	5	2	2	1	-	1
Federal	9	1	4	1	4	5	1	1	1	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	1	-	1	-	1	-	1	1	-	-	1
Mississippi	4	1	2	-	-	2	-	-	-	1	-
Federal	4	1	2	-	-	2	-	-	-	1	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Missouri	27	2	2	10	5	8	4	2	6	-	-
Federal	9	1	2	-	4	3	2	1	1	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	18	1	-	10	1	5	2	1	5	-	-
Montana	17	1	4	-	3	7	1	3	2	5	-
Federal	10	1	4	-	3	6	1	1	2	1	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	7	-	-	-	-	1	-	2	-	4	-
Nebraska	30	4	7	4	9	10	9	3	7	2	-
Federal	17	2	7	3	6	6	4	3	5	1	-
State	5	1	-	-	-	1	4	-	-	-	-
Local	8	1	-	1	3	3	1	-	2	1	-
Nevada	7	3	1	-	2	2	-	1	-	-	-
Federal	7	3	1	-	2	2	-	1	-	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-

Table 27.--Description of adult education programs in number of ratings for primary and secondary purposes, at each level of governmental sponsorship for each State or other area and for the Nation, and percents that primary and secondary ratings are of the options available for ratings for the Nation: United States, 1968-69 and 1969-70--Continued

Table 18.--Description of adult education programs in number of ratings for primary and secondary purposes, at each level of governmental sponsorship for each State or other area and for the Nation, and percents that primary and secondary ratings are of the options available for ratings for the Nation: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Options 1/	Ratings describing programs 2/									
		Basic education		High school or GED		Occupational training		General and college subjects		Other	
		Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
1	2	3	4	5	6	7	8	9	10	11	12
New Hampshire	48	1	2	-	5	22	19	24	-	1	-
Federal	9	1	2	-	-	6	-	1	-	1	-
State	16	-	-	-	-	16	-	-	-	-	-
Local	23	-	-	-	8	-	19	23	-	-	-
New Jersey	6	1	1	1	1	-	2	1	-	-	1
Federal	4	-	-	-	-	-	-	-	-	-	-
State	1	1	-	1	-	-	1	-	-	-	-
Local	1	-	1	-	1	-	1	1	-	-	1
New Mexico	31	8	4	11	3	9	3	2	4	-	2
Federal	10	5	1	1	3	4	-	1	-	-	-
State	16	2	3	8	-	4	3	-	2	-	2
Local	5	1	-	2	-	1	-	1	2	-	-
New York	52	5	1	4	-	14	8	22	6	7	1
Federal	9	1	1	-	-	7	-	1	1	-	1
State	6	2	-	1	-	1	4	1	1	1	-
Local	37	2	-	3	-	6	4	20	1	6	-
North Carolina	6	2	1	1	1	2	1	-	2	-	-
Federal	5	2	1	-	1	2	1	-	2	-	-
State	1	-	-	1	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
North Dakota	6	2	3	-	2	2	1	-	1	-	-
Federal	4	1	2	-	2	2	1	-	-	-	-
State	2	1	1	-	-	-	-	-	1	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Ohio	6	1	1	-	2	2	-	1	1	-	-
Federal	4	1	1	-	1	1	-	-	1	-	-
State	1	-	-	-	-	1	-	-	-	-	-
Local	1	-	-	-	1	-	-	1	-	-	-
Oklahoma	6	2	2	1	3	2	2	-	1	-	-
Federal	6	2	2	1	3	2	2	-	1	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Oregon	15	1	6	6	4	3	3	1	4	-	2
Federal	13	1	5	5	4	3	2	-	4	-	2
State	1	-	-	-	-	-	-	1	-	-	-
Local	1	-	1	1	-	-	1	-	-	-	-
Pennsylvania	39	3	-	2	1	17	-	17	-	-	-
Federal	9	2	-	-	-	4	-	3	-	-	-
State	9	1	-	1	1	3	-	4	-	-	-
Local	21	-	-	1	-	10	-	10	-	-	-
Rhode Island	9	2	4	1	3	-	5	-	2	-	-
Federal	6	1	3	-	2	-	4	-	1	-	-
State	2	1	-	1	-	-	-	-	-	-	-
Local	1	-	1	-	1	-	1	-	1	-	-
South Carolina	11	5	2	3	1	2	1	-	-	1	-
Federal	8	4	2	2	1	2	1	-	-	-	-
State	2	1	-	1	-	-	-	-	-	-	-
Local	1	-	-	-	-	-	-	-	-	1	-
South Dakota	11	3	4	-	4	3	3	-	3	-	-
Federal	10	3	3	-	3	2	3	-	2	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	1	-	1	-	1	1	-	-	1	-	-
Tennessee	6	1	-	-	-	1	1	1	-	1	-
Federal	4	1	-	-	-	1	-	-	-	1	-
State	1	-	-	-	-	-	1	1	-	-	-
Local	1	-	-	-	-	-	-	-	-	-	-
Texas	37	6	12	2	19	27	5	-	1	-	-
Federal	13	5	5	-	10	8	2	-	1	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	24	1	7	2	9	19	3	-	-	-	-

Table 27.--Description of adult education programs in number of ratings for primary and secondary purposes, at each level of governmental sponsorship for each State or other area and for the Nation, and percents that primary and secondary ratings are of the options available for ratings for the Nation: United States, 1968-69 and 1969-70--Continued

Table 18.--Description of adult education programs in number of ratings for primary and secondary purposes, at each level of governmental sponsorship for each State or other area and for the Nation, and percents that primary and secondary ratings are of the options available for ratings for the Nation: United States, 1968-69 and 1969-70--Continued

State or other area and level of governmental sponsorship of adult education	Options 1/	Ratings describing programs 2/									
		Basic education		High school or GED		Occupational training		General and college subjects		Other	
		Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
1	2	3	4	5	6	7	8	9	10	11	12
Utah	11	1	1	-	-	1	2	1	2	1	1
Federal	8	1	1	-	-	1	2	1	1	1	-
State	2	-	-	-	-	-	-	-	-	-	-
Local	1	-	-	-	-	-	-	-	1	-	1
Vermont	7	1	3	-	3	3	1	-	2	-	1
Federal	7	1	3	-	3	3	1	-	2	-	1
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Virginia	13	1	1	9	-	1	1	1	-	-	-
Federal	4	1	1	-	-	1	1	1	-	-	-
State	2	-	-	2	-	-	-	-	-	-	-
Local	7	-	-	7	-	-	-	-	-	-	-
Washington	30	8	7	3	10	9	8	-	6	5	1
Federal	21	6	6	1	10	5	8	-	6	3	1
State	2	-	-	-	-	1	-	-	-	-	-
Local	7	2	1	2	-	3	-	-	-	2	-
West Virginia	14	2	6	-	2	4	5	2	3	-	-
Federal	13	2	6	-	1	4	4	2	2	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	1	-	-	-	1	-	1	-	1	-	-
Wisconsin	16	1	4	-	3	1	8	-	6	5	-
Federal	15	1	4	-	2	1	7	-	5	5	-
State	1	-	-	-	1	-	1	-	1	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Wyoming	4	1	1	1	1	-	2	-	1	-	-
Federal	4	1	1	1	1	-	2	-	1	-	-
State	-	-	-	-	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Outlying areas	35	9	9	1	8	14	6	1	1	1	3
Federal	23	5	4	-	2	11	4	-	-	1	-
State	12	4	5	1	6	3	2	1	1	-	3
Local	-	-	-	-	-	-	-	-	-	-	-
American Samoa	10	4	2	-	-	4	1	1	-	-	-
Federal	5	1	1	-	-	3	1	-	-	-	-
State	5	3	1	-	-	1	-	1	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-	-	-	-	-	-
Guam	5	1	-	-	1	4	-	-	-	-	1
Federal	4	1	-	-	-	3	-	-	-	-	-
State	1	-	-	-	-	1	-	-	-	-	1
Local	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	11	2	5	-	6	4	4	-	-	1	1
Federal	7	1	2	-	2	3	2	-	-	1	-
State	4	1	3	-	4	1	2	-	-	-	1
Local	-	-	-	-	-	-	-	-	-	-	-
Trust Terr., Pac. Is.	4	1	1	-	1	2	-	-	1	-	1
Federal	3	1	-	-	-	2	-	-	-	-	-
State	1	-	1	-	1	-	-	-	1	-	1
Local	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands	5	1	1	1	-	-	1	-	-	-	-
Federal	4	1	1	-	-	-	1	-	-	-	-
State	1	-	-	1	-	-	-	-	-	-	-
Local	-	-	-	-	-	-	-	-	-	-	-

1/ These are numbers of line entries per State, including both identifiable programs and grouped reportings.
2/ Respondents were instructed to star the primary purpose, and to check all descriptions that applied to each program reported, thus permitting multiratings for the same program. Not all programs were rated.
3/ Read percentages across. Total for primary ratings cannot exceed 100 percent. Total for secondary ratings may exceed 100 percent.

Outlying area: Percent of Programs with Ratings

	No. of line entries	Basic education		High school or GED		Occupational training		General and college subjects		Other	
		Prim.	Sec.	Prim.	Sec.	Prim.	Sec.	Prim.	Sec.	Prim.	Sec.
Total	35	25.7	25.7	2.9	22.9	40.0	17.1	2.9	2.9	2.9	8.6
Federal	23	21.7	17.4	- - -	8.7	47.8	17.4	- - -	- - -	4.4	- - -
State	12	33.3	41.7	8.3	50.0	25.0	16.7	8.3	8.3	- - -	25.0
Local	- -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

Wishing to gain an overall picture of the relative significance of the different purposes, we can look at the national totals in table 27 of the data on the primary purposes of programs at federal, state and local levels of sponsorship. The data are straightforward: they indicate, for example, that the state coordinators filling out the questionaire thought that five times as many programs sponsored at the local level had occupational training as their primary purpose as basic education. From this we can conclude that in locally-sponsored programs alone across the nation, the emphasis was five times more on occupational training as on basic education programs.

Regarding the governmental level of sponsorship, the data on emphasis of program purpose must be interpreted with some caution. We must remember states were requested in OE-2323 to avoid duplication of figures by listing programs of multiple sponsorship only under highest level of governmental involvement. Therefore, the prominence of Adult Basic Education as a program purpose at the federally-sponsored level, for instance, may obscure the fact that many programs in adult education were partially sponsored by the local public school or the state. This reservation does not hold, however, for "General and College Subjects" when that purpose was compared with other purposes on the local level; in that case we are concerned with sponsorship only at the lowest governmental level.

The method is a fair one but has the limitation of ignoring information about secondary purposes. To solve this problem, the data have therefore been worked with further; a weighted rating has been calculated for each of the five purposes in each of the 50 states and the District of Columbia. By this method a purpose with a primary rating receives two points while one with a secondary rating receives one. Adding these points together results in the weighted rating. No purpose is able to receive a weighted rating larger than twice the number of programs (or line entries) ascribed by the coordinator as having that purpose either primarily or secondarily.

Table 28 presents these data by state and relates it to that state's figures on enrollment and instructional staff for 1968-69. The data on instructional staff, enrollment, and weighted ratings for each of the five purposes has been rank-ordered by state and the rank-difference correlations provided as an aid to analysts in summarizing and interpreting the relationships between the three variables.

Table 28.–Enrollment and instructional staff in numbers and rankings, and descriptions of rated adult education programs with percentage values and rankings, by State or other area: United States, 1968-69

State or other area	Enrollment		Instructional staff		Descriptions of programs									
					Basic education		High school or GED		Occupational training		General and college subjects		Other	
	Number	Rank	Number	Rank	Percent[1]	Rank	Percent[1]	Rank	Percent[1]	Rank	Percent[1]	Rank	Percent[1]	Rank
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
50 States and D.C.	8,346,828	- - -	229,361	- - -	23.7	- - -	21.7	- - -	43.2	- - -	22.4	- - -	7.3	- - -
State Average	163,663.3	- - -	4,497.3	- - -	30.1	- - -	22.2	- - -	38.3	- - -	17.5	- - -	6.4	- - -
Alabama	159,601	16	3,555	23	31.8	24	31.8	11½	45.5	18	13.6	29½	0.0	38
Alaska	10,246	46	491	47	18.9	37	18.9	29	58.5	9	7.6	40	18.9	5
Arizona	35,427	33	1,460	32	26.1	30	15.2	36	65.2	3	28.3	8	0.0	38
Arkansas	8,672	47	587	44	58.3	2½	50.0	3	8.3	50	0.0	48	0.0	38
California	1,076,678	1	16,599	3	31.1	25	27.0	17	40.5	24	37.8	5	0.0	38

See footnote at end of table.

Table 28.--Enrollment and instructional staff in numbers and rankings, and descriptions of rated adult education programs with percentage values and rankings, by State or other area: United States, 1968-69--Continued

State or other	Enrollment area		Instructional staff		Descriptions of programs									
					Basic education		High school or GED		Occupational training		General and college subjects		Other	
	Number	Rank	Number	Rank	Percent[1]	Rank	Percent[1]	Rank	Percent[1]	Rank	Percent[1]	Rank	Percent[1]	Rank
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Colorado	82,916	25	2,368	28	25.0	33	18.2	31½	63.6	4	25.0	12½	0.0	38
Connecticut	99,026	21	3,506	24	16.7	40½	5.6	46	55.6	11	27.8	9	0.0	38
Delaware	27,914	38	860	41	10.0	48	8.0	42	24.0	41	8.0	38	2.0	24
Dist. of Columbia	22,991	42	424	48	44.4	9½	22.2	23	33.3	30	5.6	42½	0.0	38
Florida	579,309	4	12,878	4	27.3	28	22.7	21½	56.8	10	27.3	10	15.9	12
Georgia	152,666	18	4,066	18	62.5	1	18.8	30	62.5	6	0.0	48	0.0	38
Hawaii	29,016	37	949	38	38.9	14	38.9	7	0.0	51	5.6	42½	16.7	10
Idaho	2,848	50	681	43	33.3	21	0.0	49½	33.3	30	33.3	6	0.0	38
Illinois	304,173	9	11,720	5	22.7	36	22.7	21½	18.2	44½	18.2	22½	18.2	8
Indiana	95,572	22	3,650	22	35.0	19½	20.0	26½	30.0	34	20.0	18	0.0	38
Iowa	197,412	13	5,201	14	14.1	42	14.1	38	23.4	42	62.5	1	18.8	6
Kansas	44,955	31	1,112	36	11.5	44½	3.9	47	40.4	25	0.0	48	3.9	21
Kentucky	32,754	35	1,255	35	40.0	12½	30.0	15	30.0	34	0.0	48	0.0	38
Louisiana	80,714	26	2,089	29	25.0	33	20.0	26½	25.0	39	0.0	48	25.0	3½
Maine	22,634	43	1,278	34	30.0	26½	20.0	26½	10.0	49	20.0	18	0.0	38
Maryland	164,578	15	4,682	16	8.3	49	34.5	10	52.4	12	31.0	7	0.0	38
Massachusetts	92,253	24	3,779	20	30.0	26½	16.7	34	63.3	5	6.7	41	16.7	10
Michigan	134,907	19	2,850	25	40.0	12½	20.0	26½	60.0	7½	10.0	34½	0.0	38
Minnesota	271,420	11	5,924	12	35.0	19½	35.0	9	60.0	7½	25.0	12½	5.0	20
Mississippi	65,096	29	1,868	30	50.0	6	0.0	49½	50.0	14	0.0	48	25.0	3½
Missouri	93,797	23	4,646	17	11.1	46	46.3	4	37.0	26	18.5	21	0.0	38
Montana	23,330	41	1,110	37	17.7	39	8.8	40	44.1	19	23.5	15	29.4	2
Nebraska	112,049	20	3,939	19	25.0	33	28.3	15	48.3	16	21.7	16	6.7	18½
Nevada	12,348	44	541	46	50.0	6	14.3	37	28.6	36	14.3	27½	0.0	38
New Hampshire	24,740	39	906	39	4.2	51	8.3	41	65.6	2	50.0	2	2.1	23
New Jersey	457,834	5	20,771	2	25.0	33	25.0	19½	16.7	46	16.7	25	8.3	16
New Mexico	10,440	45	567	45	32.3	23	40.3	6	33.9	28	12.9	31	3.2	22
New York	1,011,971	2	32,629	1	10.6	47	7.7	43	34.6	27	48.1	3	14.4	13
North Carolina	177,428	14	5,251	13	41.7	11	25.0	19½	41.7	22	16.7	25	0.0	38
North Dakota	7,566	48	219	50	58.3	2½	16.7	34	41.7	47	8.3	36½	0.0	38
Ohio	321,963	7	8,012	8	25.0	33	16.7	34	33.3	30	25.0	12½	0.0	38
Oklahoma	32,878	34	1,696	31	50.0	6	41.7	5	50.0	14	8.3	36½	0.0	38
Oregon	158,281	17	5,198	15	26.7	29	53.3	2	30.0	34	20.0	18	6.7	18½
Pennsylvania	275,006	10	7,346	9	7.7	50	6.4	45	43.6	20	43.6	4	0.0	38
Rhode Island	30,109	36	880	40	44.4	9½	27.8	16	27.8	37	11.1	33	0.0	38
South Carolina	39,045	32	1,374	33	54.6	4	31.8	11½	22.7	43	0.0	48	9.1	15
South Dakota	23,960	40	852	42	45.5	8	18.2	31½	40.9	23	13.6	29½	0.0	38
Tennessee	65.369	28	2,625	26	16.7	40½	0.0	49½	25.0	39	16.7	25	16.7	10
Texas	344,242	6	8,475	7	32.4	22	31.1	13	79.7	1	1.4	44	0.0	38
Utah	62,225	30	2,488	27	13.6	43	0.0	49½	18.2	44½	18.2	22½	13.6	14
Vermont	6,277	49	354	49	35.7	17½	21.4	24	50.0	14	14.3	27½	7.1	17
Virginia	217,369	12	6,043	11	11.5	44½	69.2	1	11.5	48	7.7	39	0.0	38
Washington	315,031	8	6,697	10	38.3	15	26.7	18	43.3	21	10.0	34½	18.3	7
West Virginia	74,367	27	3,654	21	35.7	17½	7.1	44	46.4	17	25.0	12½	0.0	38
Wisconsin	653,032	3	9,082	6	18.8	38	9.4	39	31.3	32	18.8	20	31.3	1
Wyoming	2,393	51	174	51	37.5	16	37.5	8	25.0	39	12.5	32	0.0	38
Outlying areas	**338,748**	---	**2,838**	---	**38.6**	---	**14.3**	---	**48.6**	---	**4.3**	---	**7.1**	---
American Samoa	---	---	---	---	50.0	---	---	---	45.0	---	10.0	---	---	---
Canal Zone	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Guam	3,654	---	142	---	20.0	---	10.0	---	80.0	---	---	---	10.0	---
Puerto Rico	333,561	---	2,630	---	40.9	---	27.3	---	54.6	---	---	---	13.6	---
Trust Terr., Pac. Is.	195	---	13	---	37.5	---	12.5	---	50.0	---	12.5	---	12.5	---
Virgin Islands	1,338	---	53	---	30.0	---	20.0	---	10.0	---	---	---	---	---

[1] To figure percent, use table 27: multiply a state's total primary number for a particular program description by 2; add new primary score to related number of secondary ratings; then divide by total number of options doubled.

The percentage values presented in table 28, and listed under each of the five categories of purposes for each state, are the result of taking the weighted ratings from table 27 and computing what percentage the weighted rating represents of the largest number that the weighted rating might have been. This largest weighted rating number is calculated by multiplying the number of line entries supplied by a particular state by two, which is the maximum number of points possible to assign to a line entry in the weighting process for that particular state. (In doing this, the methodological decision was made to use the number of line entries in the state rather than the number of line entries rated in that state. Those who wish to recalculate the percentage using the second number can do so using the figures available in table 27.)

A percentage is then calculated from the fraction created by putting the weighted ratio over this largest possible weighted rating number. For example, the state of Alaska had 53 line entries in 1968-69. Seven of the line entries were rated as having basic education as a primary purpose and six more were rated as having basic education as a secondary purpose.

The calculations follow: ratings for primary purpose, 2 x 7 = 14; for primary and secondary purposes (weighted ratings), 14 + 6 = 20; possible ratings for Alaska, 2 x 53 = 106; and percentage in weighted ratings for Alaska in basic education, 20/106 = 18.9 percent.

Text table N amplifies the summary figures for the nation and presents percentages of programs (using line entries which disregard state identities) by program purpose and by governmental level of sponsorship. Text table O shows the same thing for the outlying areas. Percentages for a level may total more than 100 percent because although a line entry may not have been rated, each line entry could have been rated more than once as a secondary purpose.

Table N. Public adult education program descriptions for the 50 states and D.C.: 1968-69

	Ratings possible	Basic education		High school or GED		Occupational training		General and college subjects		Other	
		Wt. Rts.	%	Wt. Rts.	%	Wt. Rts.	%	Wt. Rts.	%	Wt. Rts.	%
50 States and D.C.											
Total	**1,772**	**420**	**23.7**	**384**	**21.7**	**765**	**43.2**	**396**	**22.4**	**130**	**7.3**
Federally-sponsored	906	322	35.5	186	20.5	422	46.6	128	14.1	60	6.6
State-sponsored	382	54	14.1	90	23.6	162	42.4	78	20.4	18	4.7
Locally-sponsored	484	44	9.1	108	22.3	181	37.4	190	39.3	52	10.7

For formula, see table 28, footnote (1)

Table O. Public adult education program descriptions for the outlying area: 1968-69

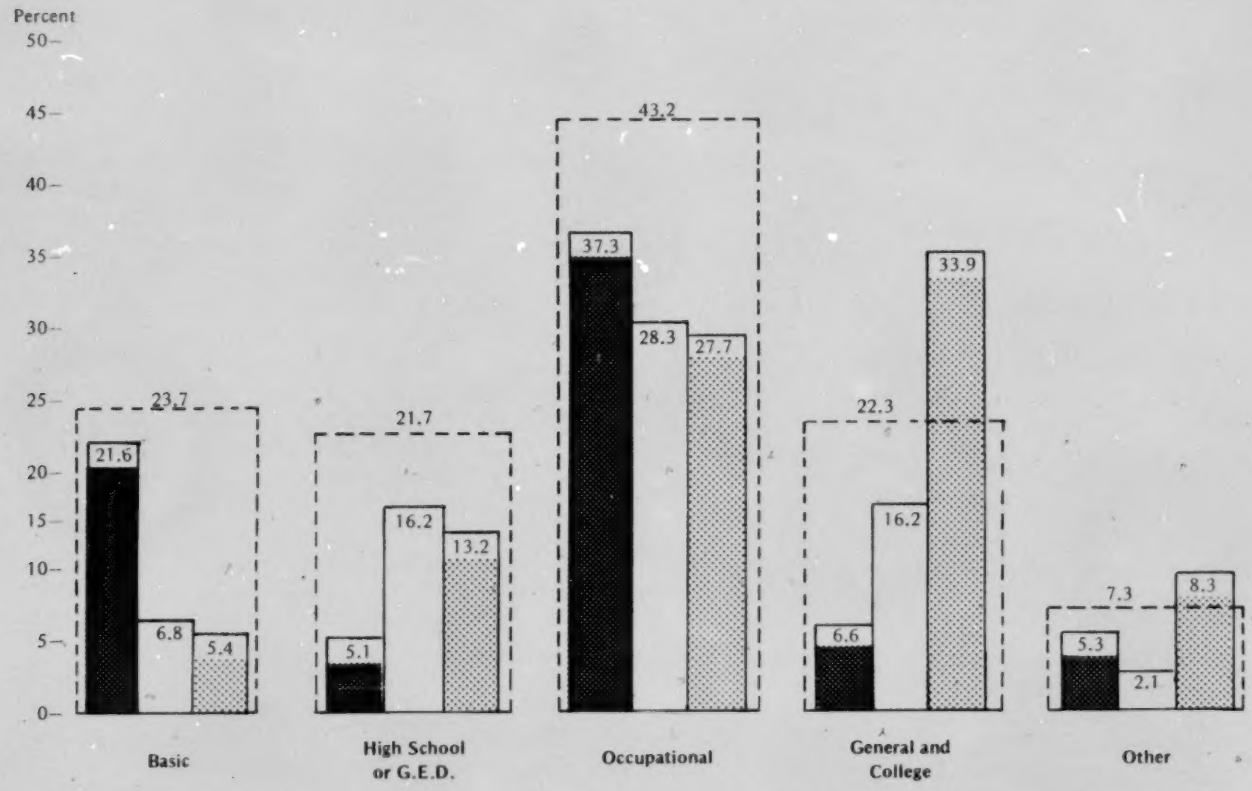
	Ratings possible	Basic education		High school or GED		Occupational training		General and college subjects		Other	
		Wt. Rts.	%	Wt. Rts.	%	Wt. Rts.	%	Wt. Rts.	%	Wt. Rts.	%
Outlying Areas											
Total	**70**	**27**	**38.6**	**10**	**14.3**	**34**	**48.6**	**3**	**4.3**	**5**	**7.1**
Federally-sponsored	46	14	30.4	2	4.4	26	56.5	---	---	2	4.4
State-sponsored	24	13	54.2	8	33.3	8	33.3	3	12.5	3	12.5
Locally-sponsored	---	---	---	---	---	---	---	---	---	---	---

For formula, see table 28, footnote (1)

Table 27 and 28 both reveal that occupational training was judged to be the primary purpose for the majority of adult education programs in the public education system. Table 27 shows this to be particularly so for federally-sponsored programs. These trends are readily apparent in Chart 1. Consistent with these data and adding some weight to the hypothesis that there is possibly a high correlation between these ratings and enrollment statistics is the fact that 30.1 percent of all enrollments were listed under the federally-sponsored Adult Vocational Ed-

ucation program. (See tables 9 and 12.) Table 27 also shows that at the local level, the greatest number of adult educational programs dealt, in 1968-69, primarily with general and college subjects.

Chart 1.–Description of adult education programs sponsored by Federal, State, and Local governments, in percent of possible scores and percent of possible ratings: State summaries, 1968-69 and 1969-70



- - - - - = Scores* in percentages for combined primary and secondary ratings for purpose of the activity. Respondent could identify only one primary purpose but several secondary purposes for the same activity, or line entry of data. Some programs were not rated. No differentiation by governmental level of sponsorship.

= Percent of primary ratings for 453 options, or line entries, for Federally-sponsored programs.

= Percent of primary ratings for 191 options, or line entries, for State-sponsored programs.

= Percent of primary ratings for 242 options, or line entries, for locally-sponsored programs.

Source: Tables 27 and 28. *See text and footnote, table 28, for formula for figuring scores.

Table 28 presents two national summary statistics for each of the five categories; both are percentages based on the sum of the weighted ratings (as indicated above) but one is calculated from the figures describing each of the five categories for each state, while the other is calculated without regard to particular states from the summarized national figure for each category.

Those states with an unusually large number of programs or line entries have a disproportionate impact on the second type of summary statistics; this explains the differences between the two types of figures. Basic education is more prominent a purpose when the figures are averaged for each state, while occupational education is less so.

The Relationships Betwen the Size of Enrollment, the Size of the Instructional Staff and a Program's Purpose

Enrollment and instructional staff data for the states are introduced in table 28 and related by means of rankings to the descriptive purposes of the programs. Visual inspection

of the rankings for data on enrollment and instructional staff in table 28 not suprisingly reveals that there is a high degree of co-variation between them: large numbers (or ranks) in one column are often associated with relatively large numbers (or ranks) in the other column. The same is true for small numbers.

To clarify more precisely the similarities and differences in rankings, the Spearman rank-difference correlation, described in detail in the section on "Statistical Indices" (pp. 29-30), was then used to provide a statistic which would indicate the degree of the relationship between the two sets of rankings.

As can be seen in matrix bb, below, the correlation between enrollment and staff rankings is quite high, +.98.

Matrix bb
Rank-difference Correlations for Table 28

	Adult education enrollment	Adult education instructional staff
Adult education instructional staff	+.98	---
Basic education	−.34	−.36
High school or GED	+.08	+.07
Occupational training	+.17	+.15
General and College subjects	+.33	+.39
Other	+.21	+.21

To clarify more precisely the similarities and differences matrix bb also presents data which describe the relationships between the rankings on enrollment and the rankings of each state's commitment to each of the five purposes (as indicated by the percentage figures, computed with the weighted ratings). The same comparison is made between the rankings on purposes and instructional staff. All of the data used are from table 28. Not surprisingly, the correlations, one for enrollments and the other for instructional staff, are very similar.

Because of the built-in negative relationship which exists between rankings on purposes (for instance, each line entry could have only one primary rating), correlations were not done between the purpose rankings and, therefore, matrix bb is only a partial matrix.

In reading these correlations, it should be remembered that the size of a correlation is a function of the reliability and validity of the methods used to measure variables being related. When working with variables of low reliability and validity, even small correlations may be fairly meaningful.

In the case of the present survey, the data overall for rankings on enrollment and staff except for several identifiable states have demonstrated reliability and validity (to be established later through comparison with other data). On the other hand, there are reasons to believe that the rankings based on weighted ratings for many of the states may have less reliability and validity: there are no sound external data with which to check all these rankings and many states failed to rate some of their programs.

For the most part, the correlations, which describe the relationship between a state's activities in adult education in the public school system, as manifested by reported enrollments and instructional staff size, and the state's judgement as to the primary and secondary purposes of its programs, are not large enough to merit much attention. Two sets of these correlations, however, deserve notice.

The correlations on basic education suggest that there was a tendency for the states with larger enrollments and larger instructional staffs to place relatively less importance on basic education, at least as far as is reflected in their judgements about their reported programs; this is the reason for the negative correlation. The opposite is the case for general and college subjects where the correlations are positive; according to the correlations large enrollments and large instructional staff accompany a greater emphasis on general and college subjects. These correlations can be checked visually by identifying states with rankings at the extremes for enrollments and relating them to the rankings for the descriptive categories. For instance, between size of enrollment and emphasis on general and college subjects, California's rankings were 1 and 5 and New York's, 2 and 3. Such a pattern, of course, is not found for all states, for the correlation between the two variables (+.33) was not high.

COMPARING DATA ON ADULT PUBLIC EDUCATION WITH OTHER KINDS OF DATA

In Chapter 2, the current data on adult education in the public education system received our attention in their own right: the interrelationships between various adult educational data revealed interesting facts about each state and for the nation. These data make it very clear that adult education is an extensive and dynamic force in the public education system.

The data on adult education in the public school system can also be viewed in conjunction with other kinds of data such as the population in the country, and facts about elementary, secondary and postsecondary education, in order to raise questions about impact and causation. These questions can then be used to further shape research; the answers can be used in making legislative and administrative decisions.

The adult education data have been compared with these kinds of data in this section. The discussion which follows, intended to be provocative rather than thorough, hopefully raises some of these questions.

A word on the sources and design of the material presented is in order here. Tables 29 through 37 use rankings to organize the data for the fifty states and the District of Columbia and present rank-difference correlations that summarize the degree of the relationships between variables. Generally the tables present data on each state; this permits the data to be examined within the context of other states and the nation.

Population and Adult Education

Tables 29 through 32 deal with the relationships between key variables of adult education and population, and the same key variables and other kinds of educational data gathered from the Office of Education and Census Bureau surveys.

Common sense suggests that there would be a high degree of relationship between enrollment and staff figures in adult education for each state (taken as percentages of the total number of students enrolled and instructors employed) with that state's percentage of adult population over the age of 18 in the nation. Table 29 presents these data. Computing the rank-difference correlation, presented in matrix cc below, we see that for both enrollment and instructional staff, the rank-difference correlation with the measure of a state's population is +.88.

The ranks used in determining correlations in matrix cc are based on the values in table 29's columns labelled, "Percent of U.S. Total." Percents were derived in this way because it makes them more meaningful, easier to remember and easier to use. They have been carried to two decimal places to reflect better the precision of the numbers on which they are based and, to reduce the number of ties between rankings.

Table 29.--Population over age 18, adult education enrollment and instructional staff, in numbers, each with respective percent of U.S. total, and rank, by State: United States, 1968-69

State	Population over age 18[1]			Enrollment						Instructional staff					
				All adult education			27 selected Federal programs			All adult education			27 selected Federal programs		
	Number in thousands	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
50 States and D.C.	129,067	100.01	---	8,346,828	100.01	---	4,609,685	100.02	---	229,361	100.03	---	115,582	100.01	---
Alabama	2,225	1.72	21	159,601	1.91	16	158,188	3.43	9	3,555	1.55	23	3,527	3.05	13
Alaska	154	0.12	51	10,246	0.12	46	7,401	0.16	44	491	0.21	47	347	0.30	46
Arizona	1,017	0.79	34	35,427	0.42	33	33,852	0.73	27	1,460	0.64	32	1,417	1.23	30
Arkansas	1,278	0.99	32	8,672	0.10	47	7,272	0.16	44	587	0.26	44	518	0.45	39
California	12,453	9.65	1	1,076,678	12.90	1	367,591	7.97	3	16,599	7.24	3	5,703	4.93	5
Colorado	1,319	1.02	31	82,916	0.99	25	77,611	1.68	18	2,368	1.03	28	2,225	1.93	22
Connecticut	1,945	1.51	24	99,026	1.19	21	25,783	0.56	32½	3,506	1.53	24	1,457	1.26	28
Delaware	335	0.26	47	27,914	0.33	38	14,838	0.32	38	860	0.38	41	399	0.35	43
Dist. of Columbia	522	0.40	40	22,991	0.28	41½	7,709	0.17	42½	424	0.19	48	143	0.12	51
Florida	4,108	3.18	9	579,309	6.94	4	297,930	6.46	5	12,878	5.62	4	5,706	4.94	4
Georgia	2,868	2.22	15	152,666	1.83	18	151,791	3.29	10	4,066	1.77	18	4,022	3.48	10
Hawaii	475	0.37	41	29,016	0.35	37	14,219	0.31	39	949	0.41	38	439	0.38	41
Idaho	444	0.34	43½	2,848	0.03	50½	2,848	0.06	50	681	0.30	43	681	0.59	35
Illinois	7,103	5.50	4	304,173	3.64	9	85,052	1.85	16	11,720	5.11	5	4,037	3.50	9
Indiana	3,224	2.50	12	95,572	1.15	22	24,101	0.52	34	3,650	1.59	22	2,368	2.05	20
Iowa	1,803	1.40	25	197,412	2.37	13	61,923	1.34	22	5,201	2.27	14½	3,018	2.61	16
Kansas	1,496	1.16	28	44,955	0.54	31	32,538	0.71	29	1,112	0.49	37	820	0.71	34
Kentucky	2,083	1.61	23	32,754	0.39	34½	32,754	0.71	29	1,255	0.55	35	1,255	1.09	31
Louisiana	2,248	1.74	20	80,714	0.97	26	69,634	1.51	19	2,089	0.91	29	1,694	1.47	26½
Maine	631	0.49	36	22,634	0.27	43	6,992	0.15	47½	1,278	0.56	34	395	0.34	44

See footnote at end of table

Table 29.--Population over age 18, adult education enrollment and instructional staff, in numbers, each with respective percent of U.S. total, and rank, by State: United States, 1968-69--Continued

State	Population over age 18[1]			Enrollment						Instructional staff					
				All adult education			27 selected Federal programs			All adult education			27 selected Federal programs		
	Number in thousands	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Maryland	2,354	1.82	18	164,578	1.97	15	51,144	1.11	23	4,682	2.04	16	2,357	2.04	21
Massachusetts	3,600	2.79	10	92,253	1.11	24	25,734	0.56	32½	3,779	1.65	20	1,124	0.97	33
Michigan	5,431	4.21	7	134,907	1.62	19	134,907	2.93	12	2,850	1.24	25	2,850	2.47	18
Minnesota	2,303	1.78	19	271,420	3.25	11	139,220	3.02	11	5,924	2.58	12	3,859	3.34	11
Mississippi	1,428	1.11	29	65,096	0.78	28½	65,096	1.41	21	1,868	0.81	30	1,868	1.62	25
Missouri	3,046	2.36	13	93,797	1.12	23	40,463	0.88	26	4,646	2.03	17	1,143	0.99	32
Montana	434	0.34	43½	23,330	0.28	41½	13,742	0.30	40	1,110	0.48	36	473	0.41	40
Nebraska	937	0.73	35	112,049	1.34	20	78,193	1.70	17	3,939	1.72	19	2,449	2.12	19
Nevada	277	0.22	48½	12,348	0.15	44	12,348	0.27	41	541	0.24	46	541	0.47	38
New Hampshire	458	0.36	42	24,740	0.30	39	19,273	0.42	35	906	0.40	39	588	0.51	37
New Jersey	4,700	3.64	8	457,834	5.49	5	49,023	1.06	24	20,771	9.06	2	2,098	1.82	23
New Mexico	567	0.44	39	10,440	0.13	45	6,882	0.15	47½	567	0.25	45	291	0.25	48
New York	12,212	9.46	2	1,011,971	12.22	2	464,261	10.07	2	32,629	14.23	1	5,401	4.67	6
North Carolina	3,283	2.54	11	177,428	2.13	14	171,680	3.72	8	5,251	2.29	13	5,069	4.39	7
North Dakota	389	0.30	46	7,566	0.09	48	7,566	0.16	44	219	0.10	50	219	0.19	49
Ohio	6,789	5.27	6	321,963	3.86	7	232,879	5.05	7	8,012	3.50	8	4,214	3.65	8
Oklahoma	1,694	1.31	26	32,878	0.39	34½	32,878	0.71	29	1,696	0.74	31	1,696	1.47	26½
Oregon	1,328	1.03	30	158,281	1.90	17	110,390	2.40	13	5,198	2.27	14½	2,901	2.51	17
Pennsylvania	7,869	6.10	3	275,006	3.30	10	103,712	2.25	14	7,346	3.20	9	3,625	3.14	12
Rhode Island	611	0.47	37½	30,109	0.36	36	7,855	0.17	42½	880	0.38	40	299	0.26	47
South Carolina	1,652	1.28	27	39,045	0.47	32	15,228	0.33	37	1,374	0.60	33	632	0.55	36
South Dakota	415	0.32	45	23,960	0.29	40	15,673	0.34	36	852	0.37	42	428	0.37	42
Tennessee	2,580	2.00	17	65,369	0.78	28½	40,937	0.89	25	2,625	1.14	26	1,880	1.63	24
Texas	6,899	5.35	5	344,242	4.12	6	302,539	6.56	4	8,475	3.70	7	7,372	6.39	2
Utah	601	0.47	37½	62,225	0.75	30	32,743	0.70	31	2,488	1.08	27	1,446	1.25	29
Vermont	277	0.22	48½	6,277	0.08	49	6,277	0.14	49	354	0.15	49	354	0.31	45
Virginia	2,957	2.29	14	217,369	2.60	12	102,937	2.23	15	6,043	2.64	11	3,031	2.62	15
Washington	2,158	1.67	22	315,031	3.77	8	286,060	6.21	6	6,697	2.92	10	6,035	5.22	3
West Virginia	1,206	0.93	33	74,367	0.89	27	66,635	1.45	20	3,654	1.60	21	3,268	2.83	14
Wisconsin	2,670	2.07	16	653,032	7.82	3	491,490	10.66	1	9,082	3.96	6	7,726	6.98	1
Wyoming	202	0.16	50	2,393	0.03	50½	2,393	0.05	51	174	0.08	51	174	0.15	50

[1] Current Population Reports, Series P-25, No. 437, January 16, 1970, p. 7. See reference 34.

Most of the correlations presented in matrix cc are high; this suggests that there is a reasonable amount of validity in the rankings of enrollment and staff figures, and indeed, is a healthy sign that the surveys under present discussion can be considered reliable sources for data. Having said this, we should point out that a few of the correlations are particularly high because they are correlating a part of the data with the whole; e.g., the rankings for the enrollments in the 27 federal programs have been correlated with rankings for all enrollments in the adult education programs offered in the public education system. There is obviously a built-in relationship such as we would find in correlating people's height and weight. (Making such a comparison is like asking a mother whether she would recommend her child for a job. Does he have a good character? Of course she says yes.)

Besides giving general credence to the survey data, a logically expected high correlation such as +.88 between adult education enrollments and a state's population over 18

Matrix cc
Rank-difference Correlations for Table 29

	Population over age 18 (% of U.S. total)	Enrollment: In all adult education (% of U.S. total)	Enrollment: In 27 selected Federal programs (% of U.S. total)	Instructional staff for all adult education (% of U.S. total)
Enrollment				
In all adult education (percent of U.S. total)	+.88	---	---	---
In 27 selected Federal programs (percent of U.S. total)	+.79	+.93	---	---
Instructional staff				
For all adult education (percent of U.S. total)	+.88	+.97	+.88	---
For 27 selected Federal programs (percent of U.S. total)	+.81	+.92	+.95	+.92

years guides us in quickly identifying particular states which deviate from the rest. For instance, for the variables mentioned it is easy in table 29 to compare ranks in columns 4 and 7. For most states the difference between ranks is quite minimal. But for some (Arkansas, Iowa, Massachusetts, Michigan, Nebraska, Oregon, Washington and Wisconsin) the difference between the rankings is 12 or more. It is possible in reporting enrollment data, some of these states exaggerated or underestimated the number of their citizens who were enrolled in public adult education. Each state will know best which is true in its case. At the minimum these discrepancies merit special attention for these states in future surveys.

Each state has been ranked by the percentage of its enrollment in the 27 federally-sponsored programs to the national total and by the size of its population over the age of 18; a rank-difference correlation of +.79 was computed. Interestingly, when the rank-difference correlation for the size of a state's population over the age of 18 and the percentage of its adult education enrollment (as a percent of the national total) is calculated, we arrive at the correlation of +.88. The .09 difference between the two correlations, although relatively small, suggests that the enrollment in the 27 federal programs is distributed unevenly among the states; this unevenness is reflected in the relatively lower correlation of +.79. When a state's enrollments in "other" federal, state and local programs is included before the rankings are computed, this unevenness becomes relatively insignificant; hence we have the correlation then of +.88.

For this reason, it is not surprising that the correlation was only +.44 between rankings for states on enrollments for federal programs and rankings for all other programs (both as percentages of U.S. totals) (this correlation is not presented in matrix cc). This evidence, though not terribly striking, suggests that within each state, federal, state and local funds are being used in a supplementary fashion to meet citizen needs and demands. Finally, some states may have presented fairly complete federal figures but provided less complete data on enrollments in state and local programs.

Comparing Enrollments in Adult Education, Higher Education, Secondary and Elementary Education and Population

Matrix dd presents rank-difference correlations for all the variables in table 30. The pattern is, again, that of high correlations between variables. This appears to be true whether rankings for enrollment in adult education are compared with rankings for population over age 18 (where the correlation is +.88) or for total residiential population including all ages (where the correlation is +.87). However, though the correlations for adult education enrollments and population are high, they do not match the correlations between higher education enrollments and population (+.97) and elementary and secondary education enrollments and population (+1.00).

The rank difference correlation of +.88 between enrollments in adult education for 1968-69 and enrollments in higher education (as percents of U.S. totals) for the same year reinforces the impression that there is a congruence between these two education systems in most states.

Looking over table 30's rankings of the states' enrollments in adult education, higher education, elementary and secondary education and residential population, we see that a few states stand out whose rankings are quite dissimilar. It is possible that some states underreported their adult education enrollments. Each state knows best how accurate its figures are. The belief is that those states whose rankings in

Matrix dd

Rank-difference Correlations for Table 30

	Residential population (percent of U.S. total)	Enrollments: Adult education (percent of U.S. total)	Enrollments: Higher education (percent of U.S. total)
Enrollments			
Adult education (percent of U.S. total)	+.87	--	---
Higher education (percent of U.S. total)	+.97	+.88	---
Elementary and secondary education (percent of U.S. total)	+1.00	+.87	+.96

enrollment in adult education are higher than their rankings in enrollments in the other education sectors probably supplied accurate figures.

Table 31 presents four kinds of data, all of which are descriptive of the states' educational achievement: 1) the median number of school years completed by persons age 25 or over; 2) the percent of draftees in the state who failed the qualifying exam; 3) the percent of the state's population which earned degrees in higher education; and 4) the percent of the state's population enrolled in public adult education. The states have been ranked by these four kinds of data and rank-difference correlations have been calculated and are presented in matrix ee below. The correlations are generally fairly small.

Table 30.–Population and enrollment for different levels of education, in numbers, each with respective percent of U.S. total, and rank, by State: United States, 1968-69

State	Total residential population			Enrollment: Adult Education			Enrollment: Higher Education			Enrollment: Elementary and secondary education		
	Number[1] in thousands	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank	Number[2]	Percent of U.S. total	Rank	Number[3]	Percent of U.S. total	Rank
1	2	3	4	5	6	7	8	9	10	11	12	13
50 States and D.C.	[4]199,846	100.03	--	8,346,828	100.01	---	6,912,888	100.03	---	44,961,662	99.98	--
Alabama	3,522	1.76	21	159,601	1.91	16	91,437	1.32	27	831,661	1.85	21
Alaska	276	0.14	51	10,246	0.12	46	7,096	0.10	51	71,469	0.16	51
Arizona	1,667	0.83	34	35,427	0.42	33	83,095	1.20	30	411,070	0.91	33½
Arkansas	1,983	0.99	32	8,672	0.10	47	49,830	0.72	36	453,314	1.01	32
California	19,179	9.60	1	1,076,678	12.90	1	899,755	13.02	1	4,581,600	10.19	1
Colorado	2,067	1.03	30	82,916	0.99	25	96,878	1.40	25	524,347	1.17	29
Connecticut	2,961	1.48	24	99,026	1.19	21	98,710	1.43	23½	632,208	1.41	26
Delaware	533	0.27	47	27,914	0.33	38	15,939	0.23	48	124,666	0.28	47
District of Columbia	802	0.40	40	22,991	0.28	41½	66,625	0.96	32	149,020	0.33	44½
Florida	6,210	3.11	9	579,309	6.94	4	182,350	2.64	9	1,355,846	3.02	9
Georgia	4,579	2.29	15	152,666	1.83	18	106,873	1.55	21	1,103,306	2.45	13
Hawaii	775	0.39	41	29,016	0.35	37	22,319	0.32	46	172,230	0.38	41½
Idaho	709	0.36	42	2,848	0.03	50½	26,059	0.38	41½	178,900	0.40	39
Illinois	10,958	5.48	5	304,173	3.64	9	357,082	5.17	3½	2,273,517	5.06	6
Indiana	5,065	2.54	12	95,572	1.15	22	174,535	2.53	10	1,205,252	2.68	10
Iowa	2,775	1.39	25	197,412	2.37	13	98,949	1.43	23½	657,791	1.46	24
Kansas	2,291	1.15	29	44,955	0.54	31	90,693	1.31	28	522,211	1.16	30
Kentucky	3,224	1.61	23	32,754	0.39	34½	92,236	1.33	26	698,790	1.55	23
Louisiana	3,710	1.86	18½	80,714	0.97	26	113,897	1.65	19½	864,765	1.92	19
Maine	978	0.49	38	22,634	0.27	43	26,084	0.38	41½	232,127	0.52	38
Maryland	3,716	1.86	18½	164,578	1.97	15	117,482	1.70	18	858,766	1.91	20
Massachusetts	5,438	2.72	10	92,253	1.11	24	257,591	3.73	8	1,112,461	2.47	12
Michigan	8,673	4.34	7	134,907	1.62	19	306,440	4.43	7	2,123,573	4.72	7
Minnesota	3,663	1.83	20	271,420	3.25	11	142,946	2.07	14	895,332	1.99	17
Mississippi	2,349	1.18	28	65,096	0.78	28½	64,469	0.93	33	581,734	1.29	28

See footnotes at end of table.

Table 30.–Population and enrollment for different levels of education, in numbers, each with respective percent of U.S. total, and rank, by State: United States, 1968-69–Continued

State	Total residential population			Enrollment								
				Adult Education			Higher Education			Elementary and secondary education		
	Number[1] in thousands	Percent of U.S. total	Rank	Number	Percent of U.S. total	Rank	Number[2]	Percent of U.S. total	Rank	Number[3]	Percent of U.S. total	Rank
1	2	3	4	5	6	7	8	9	10	11	12	13
Missouri	4,610	2.31	13	93,797	1.12	23	154,775	2.24	13	1,056,101	2.35	14½
Montana	696	0.35	43½	23,330	0.28	41½	24,771	0.36	45	172,768	0.38	41½
Nebraska	1,453	0.73	35	112,049	1.34	20	60,234	0.87	34	328,685	0.73	35
Nevada	449	0.23	48	12,348	0.15	44	9,355	0.14	50	118,236	0.26	48
New Hampshire	703	0.35	43½	24,740	0.30	39	25,840	0.37	43½	145,706	0.32	46
New Jersey	7,070	3.54	8	457,834	5.49	5	157,939	2.29	12	1,421,455	3,16	8
New Mexico	994	0.50	37	10,440	0.13	45	38,110	0.55	38	. 272,567	0.61	37
New York	18,186	9.10	2	1,011,971	12,12	2	697,492	10.09	2	3,411,000	7.59	2
North Carolina	5,131	2.57	11	177,428	2.13	14	129,874	1.88	15	1,195,258	2.66	11
North Dakota	624	0.31	46	7,566	0.09	48	25,476	0.37	43½	148,965	0.33	44½
Ohio	10.610	5.31	6	321,963	3.86	7	322,089	4.66	6	2,384,160	5.30	4
Oklahoma	2,542	1.27	27	32,878	0.39	34½	101,207	1.46	22	604,017	1.34	27
Oregon	2,004	1.00	31	158,281	1.90	17	84,359	1.22	29	489,825	1.09	31
Pennsylvania	11,750	5.88	3	275,006	3.30	10	346,657	5.02	5	2,309,700	5.14	5
Rhode Island	908	0.45	39	30,109	0.36	36	35,803	0.52	39	173,393	0.39	40
South Carolina	2,669	1.34	26	39,045	0.47	32	47,027	0.68	37	648,694	1.44	25
South Dakota	665	0.33	45	23,960	0.29	40	28,677	0.42	40	167,205	0.37	43
Tennessee	3,952	1.98	17	65,369	0.78	28½	118,622	1.72	17	883,500	1.97	18
Texas	11,013	5.51	4	344,242	4.12	6	357,578	5.17	3½	2,704,000	6.01	3
Utah	1,031	0.52	36	62,225	0.75	30	66,930	0.97	31	301,116	0.67	36
Vermont	429	0.22	49	6,277	0.08	49	16,993	0.25	47	99,649	0.22	49
Virginia	4,604	2.30	14	217,369	2.60	12	114,034	1.65	19½	1,055,606	2.35	14½
Washington	3,296	1.65	22	315,031	3.77	8	129,232	1.87	16	804,205	1.79	22
West Virginia	1,819	0.91	33	74,367	0.89	27	57,401	0.83	35	409,639	0.91	33½
Wisconsin	4,211	2.11	16	653,032	7.82	3	159,668	2.31	11	954,243	2.12	16
Wyoming	322	0.16	50	2,393	0.03	50½	13,376	0.19	49	86,013	0.19	50

[1] Current Population Reports, Series P25, No. 437, January 16, 1970, p. 7. See reference 34.

[2] Chandler, 1969, p.8. United States sum is for total degree credit students excluding those in U.S. Service Schools. Total degree credit includes bachelor's and above and excludes organized occupational curricula not chiefly creditable toward a bachelor's degree. See reference 6.

[3] Barr and Foster, 1969, p. 16. See reference 3.

[4] Column total of 199,844 differing slightly from total provided here by Census publication cited in footnote (1) is probably due to rounding and is of minor significance.

Matrix ee

Rank-difference Correlations for Table 31

	Median number of school years completed by persons age 25 and over in 1970	Draftees' failure rate on qualifying examination	Higher education earned degrees (percent of state population)
Draftees' failure rate on qualifying examination	−.57	---	---
Higher education earned degrees (percent of state population)	+.33	−.62	---
Adult education enrollment (percent of state population)	+.25	−.18	.00

The reporting of a rank-difference correlation in an earlier study makes one comparison possible. In 1949, Homer Kempfer reported (reference 19) that he found a correlation for the states of +.55 between the median years of schooling acquired by persons 25 years old and over according to the 1940 census and percentage of state population enrolled in the public school adult education in 1947-48. Kempfer's correlation is noticeably larger than the correlation (+.25) in matrix ee, which correlates the same variables for the year 1968-69. One possibility is that students who have had fewer years of schooling in some states have been enrolling in public adult education in larger numbers in recent years than were enrolling in 1948. This may be due to the fact that the federal government has significantly expanded its basic education program during the past twenty years. Another factor may be the increased number of job training programs in some states.

Table 31.--Adult education enrollment, as percent of State population and rank, compared with State educational achievement, by State: United States, 1968-69

State	Median school years completed by persons age 25 and over[1]		Failure rate on qualifying examination for draftees[2]		Higher education earned degree[3] as percent of State population[4]		Adult education enrollment as percent of State population[4]	
	1970		1968		1968		1968-69	
	Year	Rank	Percent	Rank	Percent	Rank	Percent	Rank
1	2		4	5	6	7	8	9
50 States and D.C.	12.1	---	11.3	---	0.493	---	4.18	---
State average	12.1	---	9.7	---	0.528	---	3.78	---
Alabama	10.8	43	23.5	4	0.397	41	4.53	14
Alaska	12.4	4½	5.9	32½	0.149	51	3.71	19
Arizona	12.3	10½	8.8	24	0.620	12	2.13	36
Arkansas	10.5	49½	16.7	9	0.390	42½	0.44	50
California	12.4	4½	6.7	29	0.439	34	5.61	10
Colorado	12.4	4½	5.0	35	0.724	6	4.01	17
Connecticut	12.2	18	9.3	21½	0.502	25	3.34	24
Delaware	12.1	29	10.2	18	0.343	46½	5.24	12
Dist. of Columbia	12.2	18	19.3	7	1.467	1	2.87	29
Florida	12.1	29	15.2	12	0.343	46½	9.33	3
Georgia	10.8	43	23.7	3	0.353	44	3.33	25
Hawaii	12.3	10½	10.1	19	0.414	38	3.74	18
Idaho	12.3	10½	3.3	42	0.390	42½	0.40	51
Illinois	12.1	29	9.9	20	0.457	31	2.78	30
Indiana	12.1	29	5.6	34	0.601	15	1.89	39
Iowa	12.2	18	1.9	49	0.610	14	7.11	7
Kansas	12.3	10½	3.4	41	0.654	9	1.96	38
Kentucky	9.9	51	15.8	11	0.450	33	1.02	48
Louisiana	10.8	43	20.4	6	0.431	35	2.18	35
Maine	12.1	29	8.9	23	0.454	32	2.31	34
Maryland	12.1	29	10.4	17	0.403	39	4.43	15
Massachusetts	12.2	18	6.3	31	0.766	5	1.70	40
Michigan	12.1	29	7.6	25	0.536	20	1.56	42
Minnesota	12.2	18	1.6	50	0.561	19	7.41	6
Mississippi	10.7	45	32.8	1	0.399	40	2.77	31
Missouri	11.8	38	7.1	27½	0.516	22	2.04	37
Montana	12.3	10½	3.8	39½	0.564	18	3.35	23
Nebraska	12.2	18	2.0	48	0.709	7	7.71	5
Nevada	12.4	4½	7.2	26	0.248	50	2.75	32
New Hampshire	12.2	18	4.5	37	0.644	10	3.52	21

See footnotes at end of table.

Table 31.--Adult education enrollment, as percent of State population and rank, compared with State educational achievement, by State: United States, 1968-69--Continued

State	Median school years completed by persons age 25 and over[1]		Failure rate on qualifying examination for draftees[2]		Higher education earned degree[3] as percent of State population[4]		Adult education enrollment as percent of State population[4]	
	1970		1968		1968		1968-69	
	Year	Rank	Percent	Rank	Percent	Rank	Percent	Rank
1	2	3	4	5	6	7	8	9
New Jersey	12.1	29	12.8	15	0.326	48	6.48	8
New Mexico	12.2	18	14.1	13	0.482	26	1.05	47
New York	12.1	29	9.3	21½	0.535	21	5.57	11
North Carolina	10.6	47	21.6	5	0.430	36	3.46	22
North Dakota	12.0	36½	2.1	47	0.692	8	1.21	46
Ohio	12.1	29	7.1	27½	0.467	29	3.04	28
Oklahoma	12.1	29	5.9	32½	0.582	16	1.29	45
Oregon	12.3	10½	4.7	36	0.638	11	7.90	4
Pennsylvania	12.0	36½	6.4	30	0.503	24	2.34	33
Rhode Island	11.5	41	1.4	51	0.614	13	3.32	26
South Carolina	10.5	49½	26.0	2	0.296	49	1.46	43½
South Dakota	12.1	29	3.2	43	0.776	3	3.60	20
Tennessee	10.6	47	17.6	8	0.478	27	1.65	41
Texas	11.6	40	11.0	16	0.426	37	3.13	27
Utah	12.5	1	2.9	44	0.995	2	6.04	9
Vermont	12.2	18	4.4	38	0.775	4	1.46	43½
Virginia	11.7	39	16.3	10	0.350	45	4.72	13
Washington	12.4	4½	2.4	46	0.508	23	9.56	2
West Virginia	10.6	47	13.7	14	0.474	28	4.09	16
Wisconsin	12.1	29	2.5	45	0.570	17	15.51	1
Wyoming	12.4	4½	3.8	39½	0.461	30	0.74	49

[1] Census of Population: 1970. PC(1)-C, table 140. See reference 36.
[2] Simon and Grant, 1970, p. 13. See reference 31.
[3] Hooper and Chandler, 1971, p. 5. Higher education degrees include Bachelor's and above. See reference 16.
[4] Current Population Reports, Series P-25, Vol. 437, January 16, 1970, p. 7. See reference 34.

The availability of earlier data also makes it possible to observe increases or decreases in the proportion of a state's population which enrolled in adult education between 1947 and 1969. Kempfer's data (1947-48) and Holden's (1956-57) (reference 14), as well as the 1968-69 data gathered by the survey under discussion here, are all presented in table 32, in the form of three sets of rankings. Because the states of Alaska and Hawaii had not been admitted to the Union when the two earlier surveys were conducted, the data from the 1968-69 survey has been presented in two columns, one of which omits the data on Alaska and Hawaii.

Table 32.--Enrollment in adult education in the public education system, in numbers, as percent of State population, and rank, by State: United States 1968-69, 1956-57 and 1947-48

State	Adult Education Enrollment									
	1968-69				1956-57			1947-48		
	Number[1]	Percent of 1968 State[2] population	Ranks for percentages		Number[3]	Percent of 1956 State[4] population	Ranks for percentages	Number[5]	Percent of 1947 State[6] population	Ranks for percentages
			51 States	49 States			49 States			49 States
1	2	3	4	5	6	7	8	9	10	11
50 States and D.C.[7]	8,346,828	4.18	--	--	4,373,054	2.64	--	2,128,877	1.49	--
State average[8]	163,663.3	3.78	--	--	89,246.0	1.97	--	43,446.5	1.08	--

See footnotes at end of table.

Table 32.--Enrollment in adult education in the public education system, in numbers, as percent of State population, and rank, by State: United States 1968-69, 1956-57 and 1947-48--Continued

State	Adult Education Enrollment									
	1968-69				1956-57			1947-48		
	Number[1]	Percent of 1968 State[2] population	Ranks for percentages		Number[3]	Percent of 1956 State[4] population	Ranks for percentages	Number[5]	Percent of 1947 State[6] population	Ranks for percentages
			51 States	49 States			49 States			49 States
1	2	3	4	5	6	7	8	9	10	11
Alabama	159,601	4.53	14	14	30,485	0.99	35½	15,149	0.52	34
Alaska	10,246	3.71	19	--	--	--	--	--	--	--
Arizona	35,427	2.13	36	34	8,864	0.83	40	9,997	1.55	10
Arkansas	8,672	0.44	50	48	43,428	2.50	14½	16,987	0.93	19
California	1,076,678	5.61	10	10	955,175	7.27	1	588,484	6.08	1
Colorado	82,916	4.01	17	17	53,763	3.41	8	24,312	2.04	6
Connecticut	99,026	3.34	24	22	58,140	2.63	13	17,973	0.92	20
Delaware	27,914	5.24	12	12	9,460	2.31	16	5,081	1.67	8
Dist. of Columbia	22,991	2.87	29	27	13,472	1.67	24	7,000	0.82	25
Florida	579,309	9.33	3	3	128,226	3.38	9	20,767	0.84	23
Georgia	152,666	3.33	25	23	98,186	2.70	12	16,647	0.51	35½
Hawaii	29,016	3.74	18	--	--	--	--	--	--	--
Idaho	2,848	0.40	51	49	4,015	0.65	43	4,673	0.90	21
Illinois	304,173	2.78	30	28	104,464	1.11	32½	62,190	0.75	26
Indiana	95,572	1.89	39	37	49,246	1.11	32½	43,931	1.16	15
Iowa	197,412	7.11	7	7	74,982	2.73	11	71,951	2.87	4
Kansas	44,955	1.96	38	36	20,299	0.99	35½	13,443	0.73	27
Kentucky	32,754	1.02	48	46	25,421	0.86	39	5,121	0.18	45½
Louisiana	80,714	2.18	35	33	35,525	1.20	31	2,880	0.11	49
Maine	22,634	2.31	34	32	4,284	0.47	47	2,113	0.25	43
Maryland	164,578	4.43	15	15	38,252	1.39	29	28,763	1.30	12
Massachusetts	92,253	1.70	40	38	103,335	2.17	19	56,779	1.24	14
Michigan	134,907	1.56	42	40	296,014	3.91	4	98,484	1.62	9
Minnesota	271,420	7.41	6	6	71,018	2.18	18	16,087	0.58	32
Mississippi	65,096	2.77	31	29	44,671	2.09	20	3,492	0.17	47
Missouri	93,797	2.04	37	35	26,439	0.64	44	24,109	0.63	30
Montana	23,330	3.35	23	21	4,040	0.62	45	3,170	0.60	31
Nebraska	112,049	7.71	5	5	24,296	1.72	22	16,217	1.28	13
Nevada	12,348	2.75	32	30	8,626	3.48	7	661	0.44	39
New Hampshire	24,740	3.52	21	19	2,087	0.37	48	3,314	0.66	29
New Jersey	457,834	6.48	8	8	89,924	1.65	25	40,313	0.88	22
New Mexico	10,440	1.05	47	45	2,064	0.26	49	2,897	0.51	35½
New York	1,011,971	5.57	11	11	860,741	5.46	2	421,586	3.02	3
North Carolina	177,428	3.46	22	20	35,305	0.82	41	6,542	0.18	45½
North Dakota	7,566	1.21	46	44	6,747	1.05	34	667	0.12	48
Ohio	321,963	3.04	28	26	116,790	1.29	30	63,526	0.83	24
Oklahoma	32,878	1.29	45	43	35,662	1.61	26	14,984	0.71	28
Oregon	158,281	7.90	4	4	38,579	2.23	17	13,293	0.98	17
Pennsylvania	275,006	2.34	33	31	183,465	1.68	23	116,533	1.15	16
Rhode Island	30,109	3.32	26	24	11,387	1.40	28	3,465	0.45	38
South Carolina	39,045	1.46	43½	41½	79,623	3.50	6	11,270	0.57	33
South Dakota	23,960	3.60	20	18	4,982	0.73	42	1,677	0.28	42
Tennessee	65,369	1.65	41	39	48,350	1.42	27	13,579	0.43	40
Texas	344,242	3.13	27	25	162,470	1.86	21	35,354	0.48	37
Utah	62,225	6.04	9	9	33,448	4.07	3	15,186	2.40	5
Vermont	6,277	1.46	43½	41½	3,564	0.97	37	751	0.21	44
Virginia	217,369	4.72	13	13	88,602	2.50	14½	12,279	0.39	41
Washington	315,031	9.56	2	2	96,501	3.71	5	43,654	2.01	7
West Virginia	74,367	4.09	16	16	10,784	0.55	46	18,315	0.97	18
Wisconsin	653,032	15.51	1	1	125,112	3.31	10	108,863	3.35	2
Wyoming	2,393	0.74	49	47	2,741	0.90	38	3,750	1.48	11

See footnotes on page 112.

Table 32.--Enrollment in adult education in the public education system, in numbers, as percent of State population, and rank, by State: United States 1968-69, 1956-57 and 1947-48--Continued

[1] United States total includes the 50 States and the District of Columbia but excludes the outlying areas.
[2] Current Population Reports, Series P-25, No. 437, January 16, 1970, p. 7. Total residential population. See reference 34.
[3] Holden, 1959, p. 26. United States total includes the 48 States and the District of Columbia. See reference 14.
[4] Current Population Reports, Series P-25, No. 165, November 4, 1957, p. 5. Civilian population excluding persons in the Armed Forces stationed in each area. See reference 33.
[5] Kempfer, 1949, p. 19. United States total includes the 48 States and the District of Columbia. See reference 17.
[6] Current Population Reports, Series P-25, No. 72, May 1953, p. 4. Civilian population. See reference 32.
[7] Weighted by populous States; national percent based on national populations.
[8] States are equally weighted; to obtain State average, add column up and divide by 51 or 49 as the case may be.

Matrix ff below presents the rank-difference correlations based on the variables in table 32. The correlations between the three sets of rankings are marked but not high. In fact, many states changed their positions in ratings appreciably over the years. Underreportings for 1968-69, admitted by some states, such as Massachusetts and Michigan, are suggested by data in table 32 when rankings for the earlier two studies are compared with rankings from the present survey.

Matrix ff

Rank-difference Correlations for Table 32

	Adult education enrollment (as percent of State population) (49 States)	
	1968-69	1956-57
1956-57	+.42	--
1947-48	+.39	+.47

A different set of correlations, although undoubtedly similar, could be obtained if each state's rank was based on the percentage of that state's enrollment to the total U.S. enrollment instead of to that state's population. The summary figures for the nation and the state averages in table 32 reveal that enrollments in adult education expanded over both the nine-year and twelve-year period. The enrollment figures, starting with 2.1 million in 1947-48, practically doubled in each of the two succeeding surveys. Also, 21 years later, in the school year 1968-69, the average percent of state adult populations enrolled in public schools was 3.78 or nearly four times the earlier 1.08. Even considering the different bases on which these figures were collected, it must be admitted that growth has been marked, both in absolute numbers and in percentages of populations involved.

Public Adult Education and Economic Factors

Tables 33 through 35 focus on adult education statistics in relation to economic conditions of the states and expenditures for elementary and secondary education.

Table 33 presents data for 1968 or 1968-69 on each state's per capita income figure, average annual salary for the elementary-secondary school teacher, elementary-secondary pupil-teacher ratio, adult education ratio of enrollment to instructional staff, and the percentage change in that ratio between 1968-69 and 1969-70.

The ratios in table 33 are difficult to interpret. In designing this table, the postulate has been made that, as a summed measure of diversified activities within a state, the student-teacher ratio was a fair indicator, on balance, of the amount of resources allocated to the adult education field. It has been therefore assumed that the smaller the ratio, the fewer the students per instructor and hence the greater the proportion of resources invested by that state.

Table 33.--Ratio of adult education enrollment to instructional staff, and percent change from 1968-69 to 1969-70, compared with elementary-secondary pupil-teacher ratio, average annual salary of elementary-secondary teachers, and per capita income, with rankings, by State: United States 1968-69

State	Per capita income[1]		Average annual salary elementary-secondary teachers[2]		Elementary secondary pupil-teacher ratio[3]		Adult education ratio of enrollment to instructional staff[4]			
	Amount	Rank	Amount	Rank	Ratio	Rank	Ratio	Rank	Percent change 1968-69 to 1969-70	Rank
1	2	3	4	5	6	7	8	9	10	11
50 States and D.C.	3,425	--	7,900	--	23.1	--	36.4	--	1.4	--
State average	3,223.0	--	7,508.5	--	22.7	--	31.6	--	1.8	--

Table 33.–Ratio of adult education enrollment to instructional staff, and percent change from 1968-69 to 1969-70, compared with elementary-secondary pupil-teacher ratio, average annual salary of elementary-secondary teachers, and per capita income, with rankings, by State: United States 1968-69–Continued.

State	Per capita income[1]		Average annual salary elementary-secondary teachers[2]		Elementary secondary pupil-teacher ratio[3]		Adult education ratio of enrollment to instructional staff[4]			
	Amount	Rank	Amount	Rank	Ratio	Rank	Ratio	Rank	Percent change 1968-69 to 1969-70	Rank
1	2	3	4	5	6	7	8	9	10	11
Alabama	2,365	49	5,875	48½	25.9	6	44.9	8	–2.2	37
Alaska	4,053	4	10,427	1	21.9	31	20.9	42	–22.5	51
Arizona	3,026	32	7,524	25	23.5	21½	24.3	38	–22.2	50
Arkansas	2,315	50	6,155	45	23.1	24½	14.8	49	2.0	20
California	4,010	5	9,400	2½	26.0	5	64.9	2	1.9	21
Colorado	3,316	22	7,128	28	19.6	46	35.0	18	–4.6	41
Connecticut	4,303	2	8,500	9	21.2	39	28.2	29	2.5	17½
Delaware	3,842	10	8,200	13	22.9	28	32.5	23	–12.6	45
Dist. of Columbia	4,394	1	9,400	2½	20.8	41	54.2	3	–1.7	35
Florida	3,192	28	8,130	14	23.9	17	45.0	7	1.3	24
Georgia	2,791	39	7,002	34	26.5	2½	37.6	14	10.4	9
Hawaii	3,565	15	7,940	20	23.7	20	30.6	25	3.3	14½
Idaho	2,660	41	6,119	46	23.0	26½	4.2	51	16.7	7
Illinois	3,989	6	9,100	5	22.7	29	26.0	34	0.4	26½
Indiana	3,415	17	8,100	15½	24.0	14½	26.2	32	–11.1	44
Iowa	3,288	23	7,781	22	19.9	45	38.0	13	41.6	1
Kansas	3,283	24	7,003	33	21.0	40	40.4	10	22.8	4
Kentucky	2,630	45	6,523	42	24.0	14½	26.1	33	–4.2	40
Louisiana	2,644	44	6,978	35	23.9	17	38.6	12	–7.3	43
Maine	2,830	36	6,825	37	20.0	44	17.7	47½	10.2	10
Maryland	3,780	11	8,815	7	23.0	26½	35.2	17	2.6	16
Massachusetts	3,888	9	8,100	15½	21.6	34½	24.4	37	–3.7	38
Michigan	3,715	12	9,288	4	23.5	21½	47.3	4	–2.1	36
Minnesota	3,346	20	8,516	8	22.1	30	45.8	6	1.8	22
Mississippi	2,074	51	5,772	51	26.4	4	34.9	19	11.8	8
Missouri	3,264	26	7,108	29	25.0	8	20.2	44	–1.5	34
Montana	2,906	34	6,800	38	21.4	37	21.0	41	0.0	28½
Nebraska	3,200	27	6,585	41	19.5	47½	28.5	27	2.1	19
Nevada	3,971	7	8,330	12	24.1	12½	22.8	39	8.8	11
New Hampshire	3,272	25	7,058	32	21.6	34½	27.3	31	16.9	6
New Jersey	3,968	8	8,425	11	21.4	37	22.0	40	39.6	2
New Mexico	2,666	40	7,288	27	24.6	10	18.4	46	3.3	14½
New York	4,141	3	9,000	6	20.2	42½	31.0	24	–4.8	42
North Carolina	2,658	42	6,852	36	24.1	12½	33.8	22	–16.9	48
North Dakota	2,657	43	6,050	47	20.2	42½	34.6	20	–21.7	49
Ohio	3,480	16	7,725	23	24.4	11	40.2	11	0.8	25
Oklahoma	2,833	35	6,641	39	21.4	37	19.4	45	–0.5	32
Oregon	3,325	21	7,965	19	18.8	50	30.5	26	–0.3	30½
Pennsylvania	3,394	18	7,858	21	23.1	24½	37.4	15	–0.3	30½
Rhode Island	3,611	14	8,070	17	21.8	32	34.2	21	7.3	12
South Carolina	2,391	48	5,875	48½	23.9	17	28.4	28	–14.8	47
South Dakota	2,820	37	5,800	50	18.2	51	28.1	30	27.4	3
Tennessee	2,584	46	6,365	44	26.5	2½	24.9	36	0.4	26½
Texas	3,019	33	6,619	40	23.8	19	40.6	9	2.5	17½
Utah	2,793	38	7,100	30	27.6	1	25.0	35	–4.0	39
Vermont	3,053	31	7,085	31	19.0	49	17.7	47½	21.5	5
Virginia	3,074	30	7,300	26	23.4	23	36.0	16	–0.6	33
Washington	3,674	13	8,436	10	24.7	9	47.0	5	–13.0	46
West Virginia	2,433	47	6,400	43	25.1	7	20.4	43	1.5	23
Wisconsin	3,374	19	8,050	18	21.7	33	71.9	1	0.0	28½
Wyoming	3,100	29	7,543	24	19.5	47½	13.8	50	5.1	13

[1] *Survey of Current Business*, August 1970. See reference 37.
[2] Barr and Foster, 1969, page 27. See reference 3.
[3] Ibid. p. 21.
[4] See table 22.

Drawing on the national data presented in earlier tables, the national picture of the ratio of enrollment to instructional staff for each of the two years is as follows. (The ratio figure can be read as the average number of students assigned to one instructor.)

	Enrollment	Instructional staff	Ratio
1968-69	8,346,828	229,361	36.4
1969-70	9,248,020	250,381	36.9

The difference in ratios between the two years is .05, which represents a 1.4 percent increase in the number of students per instructor in 1969-70 over 1968-69. The change is small but when one considers that eight to nine million people are involved, one realizes that the impact of this change was pervasive. Of course, the situation varied considerably from state to state.

Matrix gg, below, presents the rank-difference correlations calculated from the rankings in table 33.

Matrix gg

Rank-difference Correlations for Table 33

	State per capita income amount	Average annual salary, elem.-sec. teachers, amount	Elementary-secondary pupil-teacher ratio	Adult education enrollment-staff ratio
Average annual salary, elementary-secondary teachers, amount	+.92	---	---	---
Elementary-secondary pupil-teacher ratio	−.30	−.11	---	---
Adult education enrollment-staff ratio	+.27	+.29	+.15	---
Percent change in ratio of adult education enrollment to staff, 1968-69 to 1969-70	−.02	−.12	−.21	−.14

The three rank-difference correlations in this matrix of special interest are those which use the adult education enrollment-instructional staff ratio as one variable and which use for the second variable one of the following: the state's per capita income, the average salary of the elementary-secondary teachers or the elementary-secondary pupil-teacher ratio.

It is sometimes hypothesized that states that are more prosperous, that is, have a higher per capita income, will provide their adult education students with smaller teacher-student ratios. If the data supported this belief there would have been a negative correlation between the adult education enrollment-staff ratio and the state per capita income. The fact that the correlation between these two variables is positive (+.27) suggests that the hypothesis is incorrect or otherwise faulty and that, in fact, the more prosperous states tend to have higher ratios. One explanation for the positive correlation is that the more prosperous states employ more full-time teachers, which makes it possible for the program to enroll more students per teacher (with more classes). (Data presented in tables 16 and 17 could be used to check this hypothesis.) In fact, the ratio as measured in this survey does not necessarily indicate the size of an average class in a particular state or how many classes a staff member teaches. A large state ratio may be the result of a state's employing many full-time teachers to teach adults, since the elementary-secondary teacher who is teaching adults part-time generally teaches only one or two classes. The correlation here of −.30 between state per capita income and the elementary-secondary pupil-teacher ratio is consistent with what one would expect.

Another possible explanation for the positive correlation of adult education ratios of enrollment to staff with state per capita incomes is that large enrollments tend to be associated with large ratios (see matrix jj, p. 125, where the correlation is reported to be +.63) and the size of enrollment is correlative with a state's per capita income. A statistical analyst might determine what effects these intercorrelations had on each other. Data to be presented in matrix hh demonstrates that there is, indeed, a positive correlation of +.32 between the rankings of the states by total enrollment in public adult education (computed as percent of U.S. total) and their rankings by per capita income.

It is initially surprising, too, that the second correlation of note between the adult education enrollment-instructional staff ratio and the average salary of the elementary-secondary teachers is positive, as one might suppose that states which can afford to pay teachers higher salaries would organize their adult education students into smaller classes (which might be indicated by a lower enrollment-instructional staff ratio). The same explanations hypothesized for the ratio and income correlation apply here; again, a more sophisticated statistical analysis could lead to some interesting results.

The third correlation of +.15 for the elementary-secondary

pupil-teacher ratio and the enrollment-instructional staff ratio is the least immediately surprising of the three. One would expect that states with small elementary and secondary teacher-student ratios would have small adult education staff-enrollment ratios. Nevertheless, one senses that the situation is more complicated and hopes that other analysts will do further research into the area to try to discover the exact nature of the relationship.

Data on the percentage change in a state's adult education enrollment between 1968-69 and 1969-70 is ranked and presented in table 34 beside ranked data on the states' total residential populations, per capita income and expenditure per elementary-secondary pupil. Matrix hh contains the rank-difference correlations for the same data.

The exceptionally low correlations in matrix hh indicate that a state's population, wealth and size of educational expenditures have very little to do with changes in that state's adult education enrollment. However, this observation must be quickly qualified with recognition of the fact that these data only cover changes for a period of one year—a very short time in the context of national trends.

Matrix hh

Rank-difference Correlations for Table 34

	Total State residential population (percent of U.S. total)	Per capita income, amount	Expenditure per elementary-secondary pupil amount	Adult education enrollment (percent of U.S. total)
Per capita income, amount	+.18	---	---	---
Expenditure per elementary-secondary pupil, amount	+.02	+.82.	---	---
Adult education enrollment (percent of U.S. total)	+.87	+.32	+.15	---
Percent change in adult education enrollment: 1968-69 to 1969-70	−.02	−.15	−.01	−.12

Table 34.--Adult education enrollment, as percent of U.S. total and percent change from 1968-69 to 1969-70, compared with expenditure per elementary-secondary pupil, per capita income, and total State population, in rankings, by State: United States, 1968-69

State	Total state residential population[1]			Per capita income[2]		Expenditure per elementary-secondary pupil[3]		Adult education enrollment[4]			
	Number in thousands	Percent of U.S. total	Rank	Amount	Rank	Amount	Rank	Percent of U.S. total	Rank	Percent change, 1968-69 to 1969-70	Rank
1	2	3	4	5	6	7	8	9	10	11	12
50 States and D.C.	[5]199,846	100.03	---	3,485	---	696	---	100.10	---	10.8	---
State average	3,918.5	1.96	---	3,223.0	---	662.9	---	1.96	---	11.1	---
Alabama	3,522	1.76	21	2,365	49	432	51	1.91	16	5.2	35
Alaska	276	0.14	51	4,053	4	987	2	0.12	46	34.5	5
Arizona	1,667	0.83	34	3,026	32	648	25½	0.42	33	3.4	38
Arkansas	1,983	0.99	32	2,315	50	486	48	0.10	47	10.3	21
California	19,179	9.60	1	4,010	5	665	22½	12.90	1	12.0	19
Colorado	2,067	1.03	30	3,316	22	662	24	0.99	25	0.2	43
Connecticut	2,961	1.48	24	4,303	2	826	6	1.19	21	6.0	30
Delaware	533	0.27	47	3,842	10	745	14	0.33	38	−12.2	50
District of Columbia	802	0.40	40	4,394	1	920	3	0.28	41½	−3.1	47
Florida	6,210	3.11	9	3,192	28	647	27½	6.94	4	7.9	26

See footnotes at end of table.

Table 34.--Adult education enrollment, as percent of U.S. total and percent change from 1968-69 to 1969-70, compared with expenditure per elementary-secondary pupil, per capita income, and total State population, in rankings, by State: United States, 1968-69--Continued

State	Total state residential population[1]			Per capita income[2]		Expenditure per elementary-secondary pupil[3]		Adult education enrollment[4]			
	Number in thousands	Percent of U.S. total	Rank	Amount	Rank	Amount	Rank	Percent of U.S. total	Rank	Percent change, 1968-69 to 1969-70	Rank
1	2	3	4	5	6	7	8	9	10	11	12
Georgia	4,579	2.29	15	2,791	39	530	40	1.83	18	-1.5	45
Hawaii	775	0.39	41	3,565	15	724	16	0.35	37	16.7	14
Idaho	709	0.36	42	2,660	41	559	38	0.03	50½	29.7	7
Illinois	10,958	5.48	5	3,989	6	755	12	3.64	9	19.6	13
Indiana	5,065	2.54	12	3,415	17	635	30	1.15	22	-8.6	48
Iowa	2,775	1.39	25	3,288	23	723	17	2.37	13	40.9	3
Kansas	2,291	1.15	29	3,283	24	647	27½	0.54	31	12.1	18
Kentucky	3,224	1.61	23	2,630	45	538	39	0.39	34½	15.4	16
Louisiana	3,710	1.86	18½	2.644	44	632	32	0.97	26	5.3	33½
Maine	978	0.49	38	2,830	36	567	37	0.27	43	23.1	9
Maryland	3,716	1.86	18½	3,780	11	775	9	1.97	15	9.4	24½
Massachusetts	5,438	2.72	10	3,888	9	748	13	1.11	24	4.1	37
Michigan	8,673	4.34	7	3,715	12	665	22½	1.62	19	33.7	6
Minnesota	3,663	1.83	20	3,346	20	767	10	3.25	11	0.5	42
Mississippi	2,349	1.18	28	2,074	51	462	50	0.78	28½	9.8	22
Missouri	4,610	2.31	13	3,264	26	645	29	1.12	23	22.1	10
Montana	696	0.35	43½	2,906	34	761	11	0.28	41½	-2.0	46
Nebraska	1,453	0.73	35	3,200	27	510	45	1.34	20	7.4	28
Nevada	449	0.23	48	3,971	7	648	25½	0.15	44	2.4	40
New Hampshire	703	0.35	43½	3,272	25	624	33	0.30	39	-9.8	49
New Jersey	7,070	3.54	8	3,968	8	852	4	5.49	5	51.0	1
New Mexico	994	0.50	37	2,666	40	676	20	0.13	45	39.9	4
New York	18,186	9.10	2	4,141	3	1,140	1	12.22	2	5.7	31½
North Carolina	5,131	2.57	11	2,658	42	505	46	2.13	14	16.4	15
North Dakota	624	0.31	46	2,657	43	585	36	0.09	48	6.7	29
Ohio	10,610	5.31	6	3,480	16	634	31	3.86	7	7.8	27
Oklahoma	2,542	1.27	27	2,833	35	516	44	0.39	34½	10.8	20
Oregon	2,004	1.00	31	3,325	21	793	7	1.90	17	9.4	24½
Pennsylvania	11,750	5.88	3	3,394	18	743	15	3.30	10	5.1	36
Rhode Island	908	0.45	39	3,611	14	840	5	0.36	36	20.4	12
South Carolina	2,669	1.34	26	2,391	48	478	49	0.47	32	41.4	2
South Dakota	665	0.33	45	2,820	37	589	35	0.29	40	27.4	8
Tennessee	3,952	1.98	17	2,584	46	498	47	0.78	28½	5.7	31½
Texas	11,013	5.51	4	3,019	33	526	42	4.12	6	2.9	39
Utah	1,031	0.52	36	2,793	38	527	41	0.75	30	14.4	17
Vermont	429	0.22	49	3,053	31	677	19	0.08	49	21.1	11
Virginia	4,604	2.30	14	3,074	30	600	34	2.60	12	1.3	41
Washington	3,296	1.65	22	3,674	13	673	21	3.77	8	-13.9	51
West Virginia	1,819	0.91	33	2,433	47	521	43	0.89	27	-1.4	44
Wisconsin	4,211	2.11	16	3,374	19	787	8	7.82	3	9.7	23
Wyoming	322	0.16	50	3,100	29	715	18	0.03	50½	5.3	33½

Current Population Reports, Series P-25, No. 437, January 16, 1970. See reference 34.
Survey of Current Business, August 1970. See reference 37.
Barr and Foster, 1969, page 27. See reference 3.
See tables 26 and 30.
Column total of 199,844 differing slightly from total provided here by Census publication cited in footnote (1) is probably due to rounding and is of minor significance.

Table 35 presents the same ranked data on the percentage change in each state's adult education enrollment between 1968-69 and 1969-70 and the ranked data on each state's per capita income as was presented in table 34 but with some further additions. The percentage change in ratio of enrollment to instructional staff is also calculated and ranked as is the percent change in per capita income from 1968-69 to 1969-70. Rank-difference correlations were then computed for these two sets of percentage changes and are presented in matrix ii below. Changes in per capita income seem to have very little to do with a state's changes in adult education enrollment (changes in fiscal policy seem unlikely to impact in one year) but those seriously interested in the question may wish to calculate the net differences between per capita income in 1969 and in earlier years and do further statistical analysis.

Table 35.–Changes in adult education enrollment and ratio of enrollment to instructional staff compared with change in per capita income, in rankings, by State: United States 1968-69 and 1969-70

State	Per capita income[1]					Adult education[2]			
						Enrollment		Ratio of enrollment to instructional staff	
	1968 Amount	1969 Amount	Amount change	Percent change	Rank	Percent change 1968-69 to 1969-70	Rank	Percent change 1968-69 to 1969-70	Rank
1	2	3	4	5	6	7	8	9	10
50 States and D.C.	**3,425**	**3,687**	**262**	**7.65**	--	**10.8**	--	**1.4**	--
State Average	3,223.04	3,483.00	260	8.11	--	11.1	--	1.8	--
Alabama	2,365	2,582	217	9.18	10	5.2	35	−2.2	37
Alaska	4,053	4,460	407	10.04	8	34.5	5	−22.5	51
Arizona	3,026	3,372	346	11.43	4	3.4	38	−22.2	50
Arkansas	2,315	2,488	173	7.47	30½	10.3	21	2.0	20
California	4,010	4,290	280	6.98	39	12.0	19	1.9	21
Colorado	3,316	3,604	288	8.69	12	0.2	43	−4.6	41
Connecticut	4,303	4,595	292	6.79	45	6.0	30	2.5	17½
Delaware	3,842	4,107	265	6.90	41	−12.2	50	−12.6	45
Dist. of Columbia	4,394	4,722	328	7.47	30½	−3.1	47	−1.7	35
Florida	3,192	3,525	333	10.43	6	7.9	26	1.3	24
Georgia	2,791	3,071	280	10.03	9	−1.5	45	10.4	9
Hawaii	3,565	3,928	363	10.18	7	16.7	14	3.3	14½
Idaho	2,660	2,953	293	11.02	5	29.7	7	16.7	7
Illinois	3,989	4,285	296	7.42	33	19.6	13	0.4	26½
Indiana	3,415	3,687	272	7.97	19	−8.6	48	−11.1	44
Iowa	3,288	3,549	261	7.94	21	40.9	3	41.6	1
Kansas	3,283	3,488	205	6.24	47	12.1	18	22.8	4
Kentucky	2,630	2,847	217	8.25	17	15.4	16	−4.2	40
Louisiana	2,644	2,781	137	5.18	50	5.3	33½	−7.3	43
Maine	2,830	3,054	224	7.92	22	23.1	9	10.2	10
Maryland	3,780	4,073	293	7.75	24	9.4	24½	2.6	16
Masachusetts	3,888	4,156	268	6.89	42	4.1	37	−3.7	38
Michigan	3,715	3,994	279	7.51	29	33.7	6	−2.1	36
Minnesota	3,346	3,635	289	8.64	16	0.5	42	1.8	22
Mississippi	2,074	2,218	144	6.94	40	9.8	22	11.8	8

See footnotes at end of table.

Table 35.--Changes in adult education enrollment and ratio of enrollment to instructional staff compared with change in per capita income, in rankings, by State: United States 1968-69 and 1969-70--Continued

State	Per capita income[1]					Adult education[2]			
						Enrollment		Ratio of enrollment to instructional staff	
	1968 Amount	1969 Amount	Amount change	Percent change	Rank	Percent change 1968-69 to 1969-70	Rank	Percent change 1968-69 to 1969-70	Rank
1	2	3	4	5	6	7	8	9	10
Missouri	3,264	3,458	194	5.94	49	22.1	10	-1.5	34
Montana	2,906	3,130	224	7.71	25	-2.0	46	0.0	28½
Nebraska	3,200	3,609	409	12.78	2	7.4	28	2.1	19
Nevada	3,971	4,458	487	12.26	3	2.4	40	8.8	11
New Hampshire	3,272	3,471	199	6.08	48	-9.8	49	16.9	6
New Jersey	3,968	4,241	273	6.88	43	51.0	1	39.6	2
New Mexico	2,666	2,897	231	8.67	13½	39.9	4	3.3	14½
New York	4,141	4,442	301	7.27	37	5.7	31½	-4.8	42
North Carolina	2,658	2,888	230	8.65	15	16.4	15	-16.9	48
North Dakota	2,657	3,012	355	13.36	1	6.7	29	-21.7	49
Ohio	3,480	3,738	258	7.41	34	7.8	27	0.8	25
Oklahoma	2,833	3,047	214	7.55	28	10.8	20	-0.5	32
Oregon	3,325	3,573	248	7.46	32	9.4	24½	-0.3	30½
Pennsylvania	3,394	3,659	265	7.81	23	5.1	36	-0.3	30½
Rhode Island	3,611	3,858	247	6.84	44	20.4	12	7.3	12
South Carolina	2,391	2,607	216	9.03	11	41.4	2	-14.8	47
South Dakota	2,820	3,027	207	7.34	35	27.4	8	27.4	3
Tennessee	2,584	2,808	224	8.67	13½	5.7	31½	0.4	26½
Texas	3,019	3,259	240	7.95	20	2.9	39	2.5	17½
Utah	2,793	2,997	204	7.30	36	14.4	17	-4.0	39
Vermont	3,053	3,247	194	6.35	46	21.1	11	21.5	5
Virginia	3,074	3,307	233	7.58	27	1.3	41	-0.6	33
Washington	3,674	3,848	174	4.74	51	-13.9	51	-13.0	46
West Virginia	2,433	2,603	170	6.99	38	-1.4	44	1.5	23
Wisconsin	3,374	3,632	258	7.65	26	9.7	23	0.0	28½
Wyoming	3,100	3,353	253	8.16	18	5.3	33½	5.1	13

Survey of Current Business, August 1970. See reference 37.
See tables 9 and 22.

Matrix ii

Rank-difference Correlations for Table 35

	Percent change in per capita income: 1968-69 to 1969-70	Percent change in adult education enrollment: 1968-69 to 1969-70
Percent change in adult education enrollment: 1968-69 to 1969-70	+.02	---
Percent change in ratio of adult education enrollment to staff: 1968-69 to 1969-70	-.14	+.27

Analysis of Adult Education Statistics by Size of State

Table 36 uses a new approach. States are placed in one of three groups, according to population size. The three categories are largest, medium and smallest. Within each group, the states are listed in order of their size of resident population, beginning with the most populous (1968 data). The purpose of this design was to examine the relationship between the characteristics of adult education and the size of the states. The table includes data on the states according to the percent of their adult

education enrollments to the state's total population. The state with the largest percent is Wisconsin, listed as number 1 in Chart 2.

This chart illustrates, by way of a code, which of the states belong to which of the three categories of size, large, medium or small, while also showing, by number, each state's ranking of adult education to state population. A significant pattern emerges in table 36 with the smaller states having a smaller proportion of their population enrolled in adult education. For the 17 smaller states the average was 3.12; for the 17 medium states, 3.86; and for the 17 largest states, 4.36.

Table 36.--Selected adult education statistics, by States grouped according to largest, medium, and smallest population sizes: United States 1968-69

State by size of population 1968[1]	Adult education						
	Programs reported				Agencies	Enrollment	
	Selected[2] Federal programs reported	State[3] programs identifiable	Local[3] programs identifiable	Cooperative[4] programs identifiable	Administering agencies[5] reporting	Enrollment[6] as percent of State population	Ratio[7] of enrollment to instructional staff
	Number	Number	Number	Percent of total[8]	Number	Percent	Ratio
1	2	3	4	5	6	7	8
All States, averages	**8.1**	**3.2**	**4.5**	**26.0**	**1.3**	**3.78**	**31.6**
Largest States, average	7.0	3.1	7.3	20.4	1.5	4.36	37.0
California	5	16	16	5.4	2	5.61	64.9
New York	7	6	37	17.3	3	5.57	31.0
Pennsylvania	7	9	21	40.5	2	2.34	37.4
Texas	13	--	24	37.8	1	3.13	40.6
Illinois	6	4	--*	20.0	1	2.78	26.0
Ohio	4	1	--*	20.0	1	3.04	40.2
Michigan	5	--	--	0	1	1.56	47.3
New Jersey	4	--*	--*	0	1	6.48	22.0
Florida	14	2	1*	25.0	2	9.33	45.0
Massachusetts	5	10	--	0	2	1.70	24.4
North Carolina	5	1	--	16.7	1	3.46	33.8
Indiana	8	--	--	25.0	1	1.89	26.2
Missouri	9	--	18	18.5	2	2.04	20.2
Virginia	4	2	7	7.7	1	4.72	36.0
Georgia	6	--	--	12.5	2	3.33	37.6
Wisconsin	13	1	--	75.0	1	15.51	71.9
Tennessee	4	--*	--*	25.0	1	1.65	24.9
Middle size States, average	9.4	2.8	1.8	26.8	1.2	3.86	32.5
Maryland	12	--*	10	6.3	2	4.43	35.2
Louisiana	8	1	--	11.1	1	2.18	38.6
Minnesota	9	--	--*	55.6	1	7.41	45.8
Alabama	10	--*	--	70.0	1	4.53	44.9
Washington	19	2	7	53.3	1	9.56	47.0
Kentucky	5	--	--	0	1	1.02	26.1
Connecticut	5	--*	--	16.7	2	3.34	28.2
Iowa	9	18	4	3.1	1	7.11	38.0
South Carolina	4	1	--*	66.7	1	1.46	28.4
Oklahoma	6	--	--	16.7	1	1.29	19.4
Mississippi	4	--	--	0	1	2.77	34.9
Kansas	7	19	--	19.2	1	1.96	40.4
Colorado	21	--	1	31.8	1	4.01	35.0
Oregon	13	--*	--*	30.8	1	7.90	30.5

See footnotes at end of table.

Table 36.–Selected adult education statistics, by States grouped according to largest, medium, and smallest population sizes: United States 1968-69–Continued

State by size of population 1968[1]	Adult education						
	Programs reported				Agencies	Enrollment	
	Selected[2] Federal programs reported	State[3] programs identifiable	Local[3] programs identifiable	Cooperative[4] programs identifiable	Administering agencies[5] reporting	Enrollment[6] as percent of State population	Ratio[7] of enrollment to instructional staff
	Number	Number	Number	Percent of total[8]	Number	Percent	Ratio
1	2	3	4	5	6	7	8
Arkansas	5	--*	--	20.0	1	0.44	14.8
West Virginia	13	--	--*	15.4	1	4.09	20.4
Arizona	9	6	8	39.1	2	2.13	24.3
Smallest States, average	8.0	3.8	4.5	30.7	1.1	3.12	25.4
Nebraska	16	5	8	24.1	1	7.71	28.5
Utah	8	2	1	54.6	1	6.04	25.0
New Mexico	9	16	5	32.3	2	1.05	18.4
Maine	4	--*	--	25.0	1	2.31	17.7
Rhode Island	6	2	--*	37.5	1	3.32	34.2
District of Columbia	6	--*	--	0	1	2.87	54.2
Hawaii	11	4	--	5.6	1	3.74	30.6
Idaho	3	--	--	0	1	0.40	4.2
New Hampshire	9	16	23	6.3	1	3.52	27.3
Montana	9	--	7	56.3	2	3.35	21.0
South Dakota	10	--	--*	70.0	1	3.60	28.1
North Dakota	4	--	--	--	1	1.21	34.6
Delaware	9	3*	12	20.8	1	5.24	32.5
Nevada	7	--	--	71.4	1	2.75	22.8
Vermont	7	--	--	28.6	1	1.46	17.7
Wyoming	4	--	--	50.0	1	0.74	13.8
Alaska	14	17	20	39.2	1	3.71	20.9

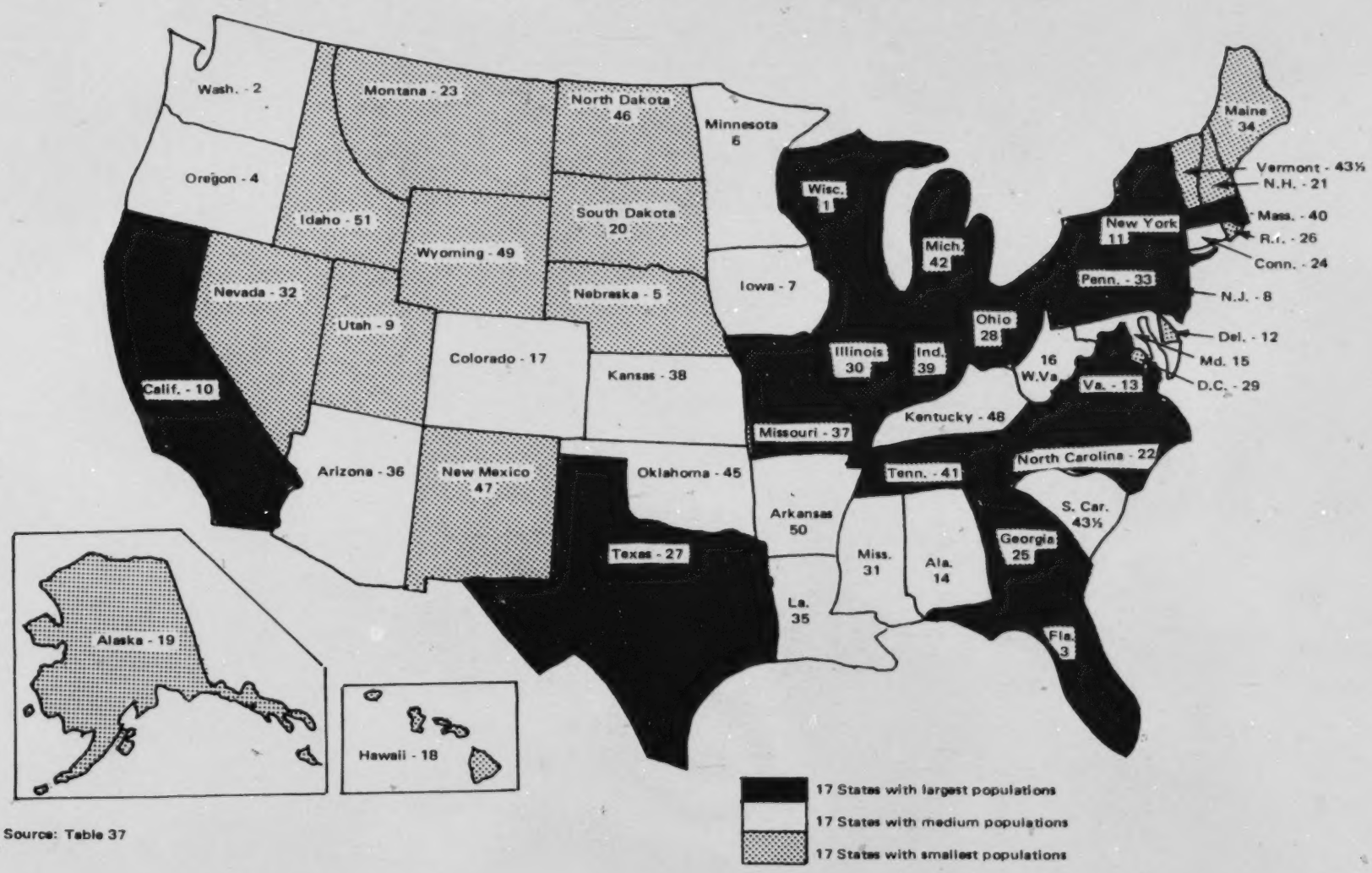
[1] Current Population Reports, Series P-25, No. 437, January 16, 1970, p. 7. See reference 34.
[2] See table 5.
[3] See table 4.
[4] See table 6.
[5] See table 2. Administering agencies reporting number from 1 to 3; maximum number includes Department of education (SEA), Community colleges (CC), and Other.
[6] See table 31.
[7] See table 22.
[8] Percents are based on total number of programs per State, including both selected Federal and other Federal programs.
*State provided grouped reporting for unidentifiable programs; only identifiable programs were used in tabulation.

Table 36 also presents data on the number of federally-, state- and locally-sponsored programs reported, on the percent of cooperatively-offered programs, on the number of administrative agencies reporting and on the enrollment-instructional staff ratio. From these data some interesting generalizations can be made.

Looking at the averages computed for the largest, medium and smallest groups, we see that, on the average the larger states have a greater variety of agencies administering their public adult education programs, a larger proportion of their state's total population enrolled in adult education and larger adult education enrollment-instructional staff ratios than the smaller states. It should be noted, however, that these trends are more apparent if one looks at the three averages for the three groupings of states than if one visually inspects the individual state's rankings according to population.

This same approach, of analyzing together data from states with roughly similar populations, has also been used on information gathered for this survey on cooperatively-offered programs. Cooperatively-offered programs are those programs operated by a public school where an outside organization or agency provides one or more of the following: students,

Chart 2.–Rank-Order of States for Adult Education Enrollments as Percent of a State's Population, 1968-69



Source: Table 37

teachers, curriculum, facilities, equipment, funds, or administration. Table 36 shows that, for the school year of 1968-69, each of the largest states offered an average of 20.4 percent of its identifiable programs cooperatively; for medium states, the average was 26.8 percent; for the smallest states, 30.7 percent. On the average, then, we find that the largest states offered 33 percent fewer programs cooperatively than did the smallest states. Taken together, the fifty states and the District of Columbia offered an average of roughly one-fourth (26.0 percent) of their identifiable programs cooperatively.

All of these figures were calculated by taking the percent of cooperatively-offered programs in each state, adding these percents together for each population grouping of states and determining the averages. These same data, or, in the case below, similar data, can be analyzed from another perspective by working with the actual numbers rather than with state percentages. Using this approach, we add together the total number of programs offered by the states in one of the groups, and the number of those programs which were cooperatively-offered. This number is then recalculated as a percentage of the total number.

This approach has been used with the data on programs offered in 1969-70 included in the analysis; the number of programs cooperatively-offered was taken as a percent of the total number of identifiable programs offered by the states within each of the three groups. (For a definition of "identifiable," see p. 32.) The text table P presents the results. Readers who wish to compare percentages in this table with those in the previous table should know that the number of identifiable programs and of cooperatively-offered programs changed from one year to the next. Specifically, New Mexico dropped one identifiable program while, in other states, 12 new programs were added, six of which were cooperatively-offered; one each in the states of Alaska, Indiana, Louisiana, Maryland, Nebraska and South Carolina (this information was derived from data summarized in tables 4, 6 and 7.)

Table P. Cooperatively-offered public adult education programs and populations of states: 1968-69 and 1969-70

	Identifiable programs	Cooperatively-offered	Percentage
Total	**851**	**226**	**26.6**
Largest states	307	72	23.5
Medium states	256	71	27.7
Smallest states	288	83	28.8

Again, we have three averages and find in them the same pattern. The largest states offered fewer programs cooperatively than did the smallest states. This time, however, the smallest states lead by only 5 percent.

The data in table 6, which show that federally-sponsored programs are more likely to be cooperatively-offered than are state- or locally-sponsored programs, is interesting to consider again in the context of this finding. For example, Montana, one of the states with a small population, reported for 1968-69 that nine of its sixteen identifiable programs were cooperatively-offered and eight of the nine were federally-sponsored. In the state with the largest population, California, only two of the state's 37 identifiable programs were cooperatively-offered. Both of these programs were federally-sponsored.

Public Adult Education and the Size of School Districts

Working with data from the years 1948 to 1959, Kempfer, Olds and Woodward (references 19, 28 and 49) found that there were proportionately larger adult education enrollments or more likely to be adult education programs in large school districts than in small ones. Evidently, where greater resources were present and subject to centralized control, there was an increasing number of adults participating in public education. Data in table 37 supports these trends.

Table 37 presents data on the size of the average school district in each state in 1968-69. This figure was arrived at by adding together the state's elementary and secondary enrollments and dividing that number by the number of school districts in the state (these two figures are also presented in the table). Some statistical niceties are possibly overlooked in this process, but they should only have tended to reduce the size of any relationship found. As in table 36, the states are grouped in table 37 by size of population within each category. The table also presents state data on the state's enrollment in adult education, on the percentage change in that enrollment between 1968-69 and 1969-70, on adult education as a percentage of the state's population and on the ratio of enrollment to instructional staff in that state.

What we find in table 37 looks contrary to expectations: the largest states have, on the average, 4,897 students in their districts, while the smallest states have 20,796.

This apparent surprise can be explained by the fact that presenting the data by average district within a state distorts the picture because there are two very large school districts—Hawaii and the District of Columbia—which are counted as the "average district" in the group of smallest states. The distortion is compensated for when the size of the average school district within each of the three groups of states is computed by adding all the enrollments within a group together and dividing that figure by the total number of districts. Figuring in this way we find the trend for elementary-secondary students

Table 37.--Selected adult education statistics compared with size of school districts, by States grouped according to largest, medium, and smallest population sizes: United States 1968-69

State by size of population 1968[1]	School districts				Adult education							
	School districts[2]	Elementary secondary enrollment[3]	Size of school districts		Enrollment[4]		Percent change in enrollment[5] from 1968-69 to 1969-70		Enrollment as percent of State population[6]		Ratio[7] of enrollment to instructional staff	
	Number	Number	Average	Rank	Number	Rank	Percent	Rank	Percent	Rank	Ratio	Rank
1	2	3	4	5	6	7	8	9	10	11	12	13
50 States and D.C.	19,339	44,961,622	[8]2,324.9	--	8,346,828	--	10.8	--	4.18	--	36.4	--
17 Largest States[8]	9,404	31,130,578	3,310.4	--	6,053,569	--	12.1	--	4.29	--	37.7	--
17 Middle Size States[8]	4,928	10,888,369	2,209.5	--	1,862,173	--	6.7	--	4.03	--	35.7	--
17 Smallest States[8]	5,007	2,942,715	587.7	--	431,086	--	10.0	--	3.49	--	25.8	--
All States, average[9]	379.2	881,601.2	10,594.1	--	163,663.3	--	11.1	--	3.78	--	31.6	--
Largest States, average[10]	553.2	1,831,210.5	4,897.3	--	356,092.3	--	11.5	--	4.36	--	37.0	--
California	1,095	4,581,600	4,184.1	18	1,076,678	1	12.0	19	5.61	10	64.9	2
New York	760	3,411,000	4,488.2	16	1,011,971	2	5.7	31½	5.57	11	31.0	24
Pennsylvania	610	2,309,700	3,786.4	20	275,006	10	5.1	36	2.34	33	37.4	15
Texas	1,234	2,704,000	2,191.3	33	344,242	6	2.9	39	3.13	27	40.6	9
Illinois	1,273	2,273,517	1,786.0	35	304,173	9	19.6	13	2.78	30	26.0	34
Ohio	648	2,384,160	3,679.3	21	321,963	7	7.8	27	3.04	28	40.2	11
Michigan	644	2,123,573	3,297.5	25	134,907	19	33.7	6	1.56	42	47.3	4
New Jersey	572	1,421,455	2,485.1	31	457,834	5	51.0	1	6.48	8	22.0	40
Florida	67	1,355,846	20,236.5	4	579,309	4	7.9	26	9.33	3	45.0	7
Massachusetts	387	1,112,461	2,874.6	28	92,253	24	4.1	37	1.70	40	24.4	37
North Carolina	157	1,195,258	7,613.1	8	177,428	14	16.4	15	3.46	22	33.8	22
Indiana	342	1,205,252	3,524.1	24	95,572	22	-8.6	48	1.89	39	26.2	32
Missouri	674	1,056,101	1,566.9	37	93,797	23	22.1	10	2.04	37	20.2	44
Virginia	134	1,055,606	7,877.7	7	217,369	12	1.3	41	4.72	13	36.0	16
Georgia	193	1,103,306	5,716.6	15	152,666	18	-1.5	45	3.33	25	37.6	14
Wisconsin	464	954,243	2,056.6	34	653,032	3	9.7	23	15.51	1	71.9	1
Tennessee	150	883,500	5,890.0	14	65,369	28	5.7	31½	1.65	41	24.9	36
Middle Size States, average[10]	289.9	640,492.3	6,088.6	--	109,539.6	--	9.7	--	3.86	--	32.5	--
Maryland	24	858,766	35,781.9	3	164,578	15	9.4	24½	4.43	15	35.2	17
Louisiana	66	864,765	13,102.5	5	80,714	26	5.3	33½	2.18	35	38.6	12
Minnesota	1,008	895,332	8,882.2	6	271,420	11	0.5	42	7.41	6	45.8	6
Alabama	118	831,661	7,048.0	11	159,601	16	5.2	35	4.53	14	44.9	8
Washington	333	804,205	2,415.0	32	315,031	8	-13.9	51	9.56	2	47.0	5
Kentucky	195	698,790	3,583.5	23	32,754	35	15.4	16	1.02	48	26.1	33
Connecticut	174	632,208	3,633.4	22	99,026	21	6.0	30	3.34	24	28.2	29
Iowa	455	657,791	1,445.7	39	197,412	13	40.9	3	7.11	7	38.0	13
South Carolina	93	648,694	6,975.2	12	39,045	32	41.4	2	1.46	43½	28.4	28
Oklahoma	704	604,017	858.0	45	32,878	34	10.8	20	1.29	45	19.4	45
Mississippi	148	581,734	3,930.6	19	65,096	29	9.8	22	2.77	31	34.9	19
Kansas	330	522,211	1,582.5	36	44,955	31	12.1	18	1.96	38	40.4	10
Colorado	181	524,347	2,897.0	27	82,916	25	0.2	43	4.01	17	35.0	18
Oregon	358	489,825	1,368.2	41	158,281	17	9.4	24½	7.90	4	30.5	26
Arkansas	391	453,314	1,159.4	42	8,672	47	10.3	21	0.44	50	14.8	49
West Virginia	55	409,639	7,448.0	10	74,367	27	-1.4	44	4.09	16	20.4	43
Arizona	295	411,070	1,393.5	40	35,427	33	3.4	38	2.13	36	24.3	38

See footnotes at end of table.

Table 37.--Selected adult education statistics compared with size of school districts, by States grouped according to largest, medium, and smallest population sizes: United States 1968-69--Continued

State by size of population 1968[1]	School districts				Adult education							
	School districts[2]	Elementary secondary enrollment[3]	Size of school districts		Enrollment[4]		Percent change in enrollment[5] from 1968-69 to 1969-70		Enrollment as percent of State population[6]		Ratio[7] of enrollment to instructional staff	
	Number	Number	Average	Rank	Number	Rank	Percent	Rank	Percent	Rank	Ratio	Rank
1	2	3	4	5	6	7	8	9	10	11	12	13
Smallest States, average[10]	294.5	173,100.9	20,796.3	--	25,358.0	--	12.3	--	3.12	--	25.4	--
Nebraska	1,589	328,685	206.9	50	112,049	20	7.4	28	7.71	5	28.5	27
Utah	40	301,116	7,527.9	9	62,225	30	14.4	17	6.04	9	25.0	35
New Mexico	89	272,567	3,062.6	26	10,440	45	39.9	4	1.05	47	18.4	46
Maine	249	232,127	932.2	43	22,634	43	23.1	9	2.31	34	17.7	47½
Rhode Island	40	173,393	4,334.8	17	30,109	36	20.4	12	3.32	26	34.2	21
District of Columbia	1	149,020	149,020.0	2	22,991	42	-3.1	47	2.87	29	54.2	3
Hawaii	1	172,230	172,230.0	1	29,016	37	16.7	14	3.74	18	30.6	25
Idaho	115	178,900	1,555.7	38	2,848	50	29.7	7	0.40	51	4.2	51
New Hampshire	160	145,706	910.7	44	24,740	39	-9.8	49	3.52	21	27.3	31
Montana	730	172,768	236.7	49	23,330	41	-2.0	46	3.35	23	21.0	41
South Dakota	1,049	167,205	159.4	51	23,960	40	27.4	8	3.60	20	28.1	30
North Dakota	416	148,965	358.1	48	7,566	48	6.7	29	1.21	46	34.6	20
Delaware	48	124,666	2,597.2	29	27,914	38	-12.2	50	5.24	12	32.5	23
Nevada	17	118,236	6,955.1	13	12,348	44	2.4	40	2.75	32	22.8	39
Vermont	274	99,649	363.7	47	6,277	49	21.1	11	1.46	43½	17.7	47½
Wyoming	161	86,013	534.2	46	2,393	51	5.3	33½	0.74	49	13.8	50
Alaska	28	71,469	2,552.5	30	10,246	46	34.5	5	3.71	19	20.9	42

[1] Current Population Reports, Series P-25, No. 437, January 16, 1970. p. 7. See reference 34.
[2] Barr and Foster, 1969, p. 9. See reference 3.
[3] Ibid, p. 16.
[4] See table 30.
[5] See tables 9 and 34.
[6] See table 31 or 32.
[7] See table 26 or 33.
[8] Weighted by populous states; to obtain National average figure across.
[9] States are equally weighted; to obtain State average, add column up and divide by 51.
[10] States are equally weighted; to obtain group averages, add columns up and divide by 17.

similar to that researchers had observed earlier for adult students: the group of largest states have 3,310 adult students in their average district while the group of the smallest states have 588 students in their average district.

Earlier, in matrix hh, the size of a state's population was found to be positively correlated with the size of that state's public adult education enrollment: the rank-difference correlation was +.87. We now find (see matrix jj) that there is a positive correlation (+.34) between the size of a state's average school district and the size of that state's public adult education enrollment.

We also see that there is a correlation of +.24 between the size of a state's average school district and its adult education enrollment, expressed as a percent of that state's population. Finally, there is a correlation of +.43 between the size of a state's average school district and that state's enrollment-instructional staff ratio. These correlations suggest that larger school districts tend to enroll a greater proportion of adult education students and possibly, to assign a greater number of students to the classroom of one teacher than do the smaller districts. The latter conclusion is tentative, for larger districts may have simply more classes per teacher.

Concern will be expressed by the statistically knowledgeable and others over the possibility that some of the correlations may result from factors that may be obscured. For instance, let us analyze the correlation of +.24 between the average size of a school district's elementary and secondary enrollments for a state and the proportion of that state's population in adult education. It is one of the more important relationshsips; this analysis hopefully will provide a model the reader can use on other survey findings as well as answer questions for those readers who are more technically-oriented.

Matrix jj

Rank-difference Correlations for Table 37

	Size of average school district	Adult education enrollment	Percent change in adult education enrollment 1968-69 to 1969-70	Adult education enrollment (percent of state population)
Adult education enrollment	+.34	---	---	---
Percent change in adult education enrollment 1968-69 to 1969-70	−.16	−.12	---	---
Adult education enrollment (percent of state population)	+.24	+.61	−.20	---
Ratio of adult education enrollment to instructional staff	+.43	+.63	−.14	+.49

Data in table 37, columns 4 and 10, can be interpreted to suggest that both an increase in average size of school districts and in proportion of adult enrollments result directly from the size of the state and that neither of the former variables independently influences the other. Technically, then, we are confronted with a need to show that the correlation of +.24 is not simply an artifact of these other relationships.

One way to do this is to determine the rank-difference correlations between average school district size for a state and proportion of enrollment for each state within the three groups of states categorized according to population size. In other words, we are attempting to control the influence of the factor of state size on the correlation (we must note, though, differences in state populations are not completely washed out in this process). Calculating these rank-difference correlations, we find that for the largest group of 17 states the correlation is +.22: for the medium states, +.26; and for the smallest states, +.09. This last correlation, however, is distorted by the presence of data on Nebraska, which had approximately twice the adult enrollment of any of the other smallest states and ranked twentieth overall. Excluding Nebraska, the correlation is +.30. The data, then, suggest that the variables are operating independently of state population size.

One possibility that remains, however, is that within any one of the three groups the states can be ranked according to population size and that this variable may still correlate with the other two. Let us take the group of the 17 largest states. If the correlation between the ranking of states by population with average state school district and with proportion of adult enrollment in the state is in each case larger than the correlation between average school district size and proportion of enrollment, then the correlation between the latter two variables may be (but not certainly) an artifact (technically, a very rough procedure).

In fact, analyses show the correlation was −.12 between population size and average school district size and +.10 between population size and proportion of enrollment. Neither correlation equals the +.22 correlation between school district size and proportion of enrollment for the 17 largest states. Then, too, the rank-difference correlation for all 50 states and the District of Columbia of +.24 between average school district size and proportion of adult enrollment is exceeded by a +.36 correlation between the population size of a state and the average school district size but not by the +.18 correlation between population size of a state and proportion of adult enrollment.

We conclude, then, that regardless of how the data are viewed, the relationship between average school district size and proportion of enrollment for the states operates, at least to some extent, if not totally, independently of state population sizes. Finding the same relationship, earlier surveys mentioned above, which were based on data on school districts alone, provide added weight to this conclusion.

Data presented earlier in this report (see p. 13) show clearly that small districts are tending to grow larger or to merge together to form single larger districts. Putting this fact together with the fact that larger districts tend to enroll a larger proportion of their population as adult education students, we conclude that adult education has been growing and will continue to grow. As observed earlier, the trend towards increasing the proportion of full-time instructors in the adult education programs also points in this direction.

One of the side effects of there being an increasing number of larger districts is that the states will find themselves participating more directly and actively in the public adult education programs: this follows from the fact that with fewer districts to coordinate, the state education agencies can devote more attention to each.

This development, in turn, points to the wisdom of

gathering data on public adult education from the state agencies rather than from the individual program or lower administrative unit. State-reported data are most useful to individual states who wish to compare their activities with those of other states and with their own activities in the past. Statistics that cannot be classified by state are, for them, much less useful.

Parenthetically, it can be noted that the size of the statistical correlation between larger school districts and a larger proportional enrollment of adult students will diminish as the number of small districts with smaller proportional enrollments dwindles. If there ever comes a time when all school districts are the same size, there will be nothing left to correlate. This does not mean, of course, that the principle identified as being in operation when adult enrollments increase is not longer valid but simply that the conditions would no longer exist under which its validity could be demonstrated.

Additional data from this survey show that while the larger districts may enroll a greater proportion of their populations as adult education students, the smaller districts (using as index for all states the average school district size) increase their enrollments by a greater amount (proportionate to their earlier enrollment figure) over a short period of time than do the larger districts; the smaller districts, are in this sense, growing faster. This is consistent with a study done by the National Education Association in 1953 which indicated that adult education was increasing three times as fast in the smaller cities as in the larger ones (reference 23). (See also p. 13.)

Matrix jj presents data from the present survey which is consistent with the findings of the NEA survey on the subject, although the rank-difference correlations are by no means sizeable. We see that the correlation was −.16 between the rankings of the states by the size of their average school district and their rankings by percentage change in adult education enrollments which took place between 1968-69 and 1969-70. (This correlation means that smaller average school districts have larger percentage increases.)

We now look at table 37 to see whether the data on state changes in enrollment are consistent with the correlation of −.16. Looking at the average for each of the three groups of states, we find that the data seem consistent. (This average in each case is computed from the state averages; the first four figures in column 8 of table 37 are computed directly from the total number of students enrolled in all the states in each group. We do not discuss them here because they reflect the old problem of uneven weighting and, additionally, do not incorporate the distinctions regarding administrative boundaries critical to the present examination.) Within the smallest group of states, the adult education enrollment increased by 12.3 percent in the average state. This is a higher percentage than that which we find for either of the other two groups, the largest and the medium-size states. Together the average percentage increase for these larger 34 states was 10.6.

Averages can be misleading when one or two individual figures from the defined group deviate significantly from the pattern. Such, in fact, is the case here; among the 17 states with the largest population, New Jersey deviates markedly, with a percentage increase in enrollment of 51.0. Indeed, even the state with the highest percentage increase among the smallest states, New Mexico, cannot match New Jersey's growth. The presence of data on New Jersey, then, helps to explain why there is not a more marked contrast between the percent of increase in enrollment in the largest and smallest states.

A statistical technique which can be used to compensate for such a bais is to use the median or middle figure of the group as a substitute for an average. (In a normal situation, the average and median would be the same.) Doing this, we find that the median value for the 17 largest states (that is, the percentage increase for the ninth state) was 7.8 percent (Ohio); for the 17 medium states, 9.7 percent (either Maryland or Oregon, for each had the same increase); and, for the 17 smallest states, 14.4 percent (Utah). Referring only to these median values, the difference between the largest and smallest states is much greater.

Another solution is to exclude New Jersey from the calculation and find the average of the 16 states remaining. This changes the percentage increase for the largest group from 11.5 to 9.0.

Earlier, we saw that the data on state changes in enrollment were consistent with the small correlation of −.16 between the size of the average school district and enrollment increases. Since, however, locating two points on a curve, or in this case, comparing figures for two school years, does not necessarily establish a trend, we should not overemphasize the consistency. On the other hand, because these data are confirmed by other research findings, the argument for a possible trend is a strong one.

An analysis of selected school districts might lead to data which would provide greater confirmation of the NEA findings. Just as there is a limit or ceiling to the size of a school district (theoretically, each of the states could become a single school district), so growth in percentage increases in enrollments in larger units (states or districts) is limited by the number of students that, theoretically, remain to be recruited. Smaller cities or districts may be growing faster because they have a larger proportion of their populations available for recruitment. In both cases, however, the ceiling has hardly been reached and the forces that propel the increases remain in effect. Their dynamics need to be better understood.

The correlations presented in matrices here raise many interesting questions about trends and forces in public education. It is hoped that analysts will go back to ferret out these relationships. It is also hoped that these data will stimulate additional analyses with other sets of external data. Such efforts will certainly lead to a better understanding of adult education in the public school system not only as it was practiced during the years 1968-69 and 1969-70, but also as it may be practiced during the years to come.

5

Summary

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HISTORY AND DESCRIPTION OF PRESENT SURVEY

In the spring of 1970, at the request of the National Association of Public School Adult Education (now the National Association of Public Continuing and Adult Education, NAPCAE) and with the assistance of a task force appointed by its affiliate, the National Council of State Directors of Adult Education, the U.S. Office of Education (USOE) undertook to survey the state of adult education in the public education system. This survey was the first to be done by the USOE solely on adult education in the public schools since 1958. (The 1958 survey is identified in the bibliography as reference 49.)

The statistics-gathering was done by the National Center for Education Statistics (NCES) which was then part of the Office of Education. [*Publisher's Note:* While it is still part of the Department of Health, Education and Welfare's Education Division, it has since been placed under the jurisdiction of the Assistant Secretary of Education.] The Center defined "public education system" to include public junior colleges but to exclude public four-year institutions. Data were gathered for two school years: 1968-69 and 1969-70. A questionnaire which had been devised with the aid of the task force was sent to each chief state school officer (this is the top administrative officer of each state's education department) with the request that he designate a coordinator to secure and transmit to the USOE the needed data.

All 50 states, the District of Columbia and 7 outlying areas contributed statistics to this survey. In 27 of the states, the person appointed to serve as coordinator was the state's director of the adult education department; in the remaining states, the coordinator held one of a variety of offices.

It was not unusual to have more than one state agency reporting statistics to the coordinator, particularly in the more populous states. In 12 states, the information was provided both by the state department of education and the state community and junior college board. In four states, the single agency reporting was the community and junior college board; the rest, the department of education.

CONTENTS OF THE SURVEY

The survey covered the following facts about an adult education program offered by the public school system in each state during the year 1968-69 and/or 1969-70: the purpose of the program, the number of students enrolled (full-time and part-time), the number of instructors employed (full-time and part-time) and whether the support or sponsorship of the program was from a local, state or federal level. The question regarding level of governmental support was included to put the data on enrollment and staff size in a helpful perspective. In case of multiple level sponsorship for a program, data were ascribed to the highest governmental level.

Information was also collected on the number of programs which were offered by a public school system in cooperation with another agency or institution (public or private).

As part of its data-collecting effort, NCES chose to specify 27 important federal programs, each of which was listed separately on the questionnaire, to the coordinators to insure that these programs would not be overlooked. Coordinators were, of course, to provide data about all their programs.

By early 1971, completed forms had been received from all of the states. Preliminary analyses of the data identified places where there were possible gaps in the information supplied or where there were inconsistencies. Gaps were filled and discrepancies were resolved by telephone conversations.

Before doing a final anaylsis of the returns, the staff of NCES did a thorough review of the literature of past surveys conducted on this subject, either by the Office of Education or by other organizations. This review put the present findings in perspective and helped NCES in processing the raw data. A discussion of that review and its findings is presented in Chapter 2 of this report.

Presentation of Data

The findings of the present study are displayed in the tables. To make it easier for the reader to compare columns of data, numbers were also given as percentages to total and the percentages ranked. The Spearman rank-difference correlation was computed in several cases in order to get a simple and provocative estimate of the degree of relationship between sets of rankings. Finally, some additional educational and census data have been included in order to give the data from this survey a meaningful context and to suggest further interpretations. (For a more complete discussion of the survey, how it was designed and administered and how data were analyzed and verified, see Chapter 3.)

Findings – General Data

Patterns of Sponsorship. The average state supplied statistics describing 17 adult education programs, with over half of those being federally-sponsored. The data were analyzed to learn whether the number of federally-, state- and locally-sponsored programs varied according to whether a state's population was of large, medium or small size. No relationship was found. (See chapter 4, pp. 119-120.)

Sponsorship of a cooperatively-offered program (about one-quarter of all programs covered in this survey were cooperatively-offered) can be at local, state or federal levels; during these years, according to the survey findings, the overwhelming majority of such programs were federally-sponsored. Locally-sponsored programs cooperatively-offered tended to be offered by public community and junior colleges.

Among the types of cooperating agencies (i.e., agencies outside the public education system) state predominate over federal, community, educational, multiagenices, or other. This pattern is quite clear at the level of federal sponsorship; it is less clear on the state-sponsored level; and almost disappears on the local level where community organizations outnumber all other types of cooperating agencies.

Enrollments. The 50 states and the District of Columbia together reported that 8,346,828 adults were enrolled in adult education programs in the public school system in 1968-69. In 1969-70, that figure was 9,248,020—a 10.8 percent increase over the previous year. Analyzing the enrollment increase from the perspective of levels of sponsorship, we found that enrollment in locally-sponsored programs increased 23.2 percent, in state-sponsored programs, 9.7 percent and in federally-sponsored programs, 6 percent. (Earlier studies report that for the year 1947-48, 2,128,877 enrollees were tabulated, and for 1956-57, 4,466,282. The average percentages that adult education enrollments were of the total population were, for the years 1947-48, 1956-57 and 1968-69 respectively, 1.49, 2.10, and 4.17.)

The increase in enrollment was disproportionately distributed over the various programs, with local programs showing the largest percent increase and federally-sponsored programs the smallest.

More than half of the total number of students enrolled participated in federally-sponsored programs. This was true for both years. Also, in general it was found that the larger the population of a state, the larger proportion of that state's population was likely to be enrolled in public school adult education. Additionally, the greater the average number of pupils in the school districts of a state, the larger proportion of that state's population tended to be enrolled in adult education in its public education system.

Enrollment changes for part-time and full-time students over the two year period are less distinctive but interesting as well. The average figures based on state data indicate that during the second year there was a slight increase in the

proportion of students enrolled as full-time rather than part-time students. (Full-time was defined to be more than 14 hours a week.) Simple national figures tend to diminish the size of the change.

Finally, rank-difference correlations show that although some states deviated markedly, the majority tended, over the years, to rank similarly on the proportion of their populations which were participating in public adult education programs. (See Chapter 4, pp. 110-112.)

Instructional Staff. According to survey data, 229,361 instructional staff were employed to teach the public adult education programs in 1968-69, with 116,504 of them teaching in federally-sponsored programs. In 1969-70, the total number of adult teachers had increased by 9.2 percent to 250,381.

Parallel to the trend in enrollment towards a greater proportion of full-time students, the statistics on the number of instructional staff show that there was an increase in the number of full-time teachers during the second year of the survey. In both this case and the case of enrollments, the change was small but if such a trend were to continue over time it would merit close scrutiny. (See Chapter 4, pp. 62-64.)

Ratio of Enrollment to Instructional Staff. The ratio of the number of students enrolled in public adult education programs across the country to the number of instructors employed to teach them rose slightly between 1968-69 and 1969-70. In the second year there was a ratio of 36.9 students to 1 teacher—an increase of .5 from the year before, when the ratio was 36.4 to 1. The rate of increase was 1.4 percent.

Calculating a ratio for each state, we found that the states with the larger enrollments in adult education courses tended to have the larger ratios.

Finally, when the ratio of enrollment to instructional staff involved in locally-sponsored programs was calculated for both years, it was found to have increased by 11.7 percent. (See Chapter 4, pp. 79, 84.)

Purposes of Programs. Each of the programs reported on in the survey was rated by the survey respondents according to which of five purposes they thought best described that program: basic education, high school or General Education Development (GED), occupational training, general and college subjects, and other. Overall, more programs were rated as having occupational training as their purpose than any other purpose. However, when the same data were analyzed according to the level of sponsorship of the programs, a different pattern emerged: for locally-sponsored programs, a majority of programs were judged to have the teaching of general and college subjects as their primary purpose.

Several other trends were observed. Those states where coordinators had generally rated basic education as a purpose for a greater proportion of their programs than other states were more likely to have fewer students enrolled in adult education than other states. Conversely, the states where general and colleges subjects were proportionally more frequently cited as the primary purpose for a program, there was likely to be a larger number of students enrolled. (See Chapter 4, pp. 102-103.)

The Four U.S. Office of Education Programs. Four out of the 27 federal programs selected by the survey staff for explicit listing and reporting on were programs sponsored by the Office of Education. These were Adult Basic Education, Civil Defense Adult Education, Manpower Development and Training and Vocational Education. Enrollments for the four programs represented 39 percent of the total national enrollment in 1968-69. For this reason, separate analysis was done on these programs. The direction in change in the ratio of enrollment to instructional staff for these programs over the two year period was downward (i.e., there were fewer students per instructor the second year) except in the Adult Basic Education Program. (See Chapter 4, pp. 86-87.)

Adult Vocational Education. Of the four U.S. Office of Education programs described above, the one which attracted by far the largest proportion of the enrollments was the Adult Vocational Education program. In 1968-69, 30 percent of all the students enrolled in public adult education were attending Adult Vocational Education classes.

Growth in this program, however, did not keep pace with growth in other programs. The percentage increase in the number of students enrolled in Adult Vocational Education over the two year period was only 6.8 percent, while the rest of the programs surveyed experienced a 12.5 percent increase.

Perplexingly, this pattern was not repeated for instructional staff but reversed. Vocational education instructional staff increased by 10.7 percent while the number of staff involved in the other programs increased by 8.6 percent. (See Chapter 4, p. 64.)

Public Community and Junior College Adult Education. In 1968-69, according to the data gathered by this survey, there were 1,275,961 students enrolled in adult education courses in public community and junior colleges. (This figure is conservative because several states failed to identify whether some of the programs were under the auspices of the community and junior colleges or another agency.) In 1969-70, that figures increased by 5.2 percent. By comparing this percentage increase with the percentage increase in enrollments in all adult education programs surveyed, we find that the community and junior colleges were growing only about half as fast as general public adult education, which grew 10.8 percent during the same period.

When percentage increases in public adult education enrollments in community and junior colleges are viewed as a function of the level of sponsorship of the program the student is enrolled in, we find the same pattern as we found with the national enrollment figures: the percentage increase in enrollment is smallest in the federally-sponsored programs and greatest in the locally-sponsored ones. In addition, it is interesting to note that, in comparison with others in the public education system, the community colleges and junior colleges do particularly well at hiring additional instructors to keep pace with increasing enrollments; this is especially true for programs sponsored at the federal level. (Chapter 4, pp. 79, 88.)

Cooperating Agencies. In providing data on a program, each respondent of the survey indicated whether there was any cooperation between the public agency and an outside agency. If there was, he identified that agency. Slightly more than one-fourth of all programs were cooperatively-offered, with almost three-quarters of the cooperation taking place in federally-sponsored programs.

Students enrolled in federally-sponsored programs which were cooperatively-offered also represented the majority of students in cooperatively-offered programs: of the 872,805 students enrolled in cooperatively-offered programs, 588,833 were attending federally-sponsored ones.

The data were also able to answer the question, of the public agencies involved in offering programs cooperatively, which type of agency appeared most frequently? In this survey, it was the state education agency, with community and junior colleges appearing less often (though on the percentage basis community colleges had more of their programs cooperatively-offered).

By breaking down the data by level of governmental sponsorship of the programs cooperatively-offered, however, and asking the same question, we find a pattern emerges, with community and junior colleges leading in a greater percentage of the cooperatively-offered local programs. When it is federal programs which are being cooperatively-offered, the state education agency is more likely to be involved. (See Chapter 4, pp. 37-40.)

Duplication Problems. Previously, these surveys have been plagued by the problem of duplication; that is, of being unable to avoid counting the same student more than once. The problem was not solved completely in this survey. Twenty-four states reported no duplication or that they tried to provide unduplicated counts.

According to the estimates of the states providing such data, only 2.1 percent of the enrollment figures represented duplications. However, various considerations suggest that duplication probably accounted for roughly 10 percent of both enrollments and instructional staff statistics. (See Chapter 3, pp. 27-28.)

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Conclusions and Implications

The present study is intended to provide adult educators with a foundation of knowledge of various aspects of adult education in the public education system. Future studies hopefully will be able to exploit this knowledge, especially to the extent that reasonably similar surveys are conducted.

Incomplete data can be a severely limiting factor. In this survey, as we have discussed earlier, the comprehensiveness of reporting on programs was not universal for all states. In some cases, states readily admitted that there were gaps in their data; in other cases, the gaps became evident in preliminary analyses and corrective steps were taken. In the future, with the cooperation of the states, interested professional organizations and the National Center for Education Statistics (NCES), Department of Health, Education and Welfare (DHEW), these kinds of problems can be eliminated.

With the experience of conducting this survey behind us, some suggestions for future surveys come to mind. In recognition of the many demands placed on state officials, the questionnaire should be revised to include only items that people in the field believe to be critical. Key terms should be defined more precisely to ease the task of completing the questionnaire. Finally, each survey should have as clear a plan of analysis as possible: this will speed the data through the computer and result in the findings being disseminated more quickly (the survey results here were all obtained through hand processing).

The data gathered for this survey and presented in these chapters establish baselines which may be useful. These data cover the areas of the ratio of enrollment to instructional staff, percentages of part-time students to the total number of students and part-time teachers to the total number of teachers, percentage changes in enrollments and instructional staff from one year to another and comparative data on the purposes of the programs (as judged by each state's survey coordinator). These data have been categorized by governmental level of the program's sponsor. Data have also been separated out on four U.S. Office of Education (OE) programs, the involvement of public community colleges and junior colleges in public and adult education and the extent of cooperation between administering agencies. Moreover, the presentation of state-by-state data, processed in terms of percentages of the national totals and ranked, should permit a state to compare itself with other states and with the nation.

The data of this survey have been compared with other data from other surveys on the same subject and with data on related areas, such as population and other types of educational enrollments, and have been found to be consistent, which suggests that this survey's data are reasonably reliable. Hopefully these results, presented in Chapter 4 and summarized in Chapter 5 will prove to be useful benchmarks to future users.

From a wider perspective, however, this research, its methodology, analyses, and findings can be viewed as only one step in the on-going process of gathering statistics on adult education in the public education system that are truly accurate, comprehensive and useful to practitioners in the field. This project was conducted with the thought in mind that the effort to undertake the survey with as high standards as possible would encourage those in the field to participate in the conducting of future surveys, and to arouse their enthusiasm and dedication. We hope, indeed, that both have been aroused.

In future surveys, reformulations of the institutional questionnaire used in this survey ought to be done in coordination with the new triennial adult education participation surveys conducted by the Bureau of the Census for NCES. [*Publisher's Note:* To date, there are two such reports, both by I.E. Okes: *Participation in Adult Education, Final Report, 1969,* National Center for Education Statistics (U.S. Government Printing Office, Washington, D.C. 20402; Stock No. 1780-01374; $2.95) and *Participation in Adult Education, 1972,* in press.)]

These participation surveys are national surveys which elicit information from individuals about themselves and their experiences as participants in adult education. Among the sponsors identified is, of course, the public education system but other sponsors are included as well. Participation surveys are also different from institutional surveys (such as the one summarized in this report) in that in participation surveys it is the adult students themselves who report the data, not the institutions who serve them.

While institutional surveys and participation surveys are designed differently and begin from different points of view

an effort to analyze together the data from both kinds of surveys can be very useful and lead to sharpened concepts and definitions. A desire to eliminate discrepancies between the data in the two kinds of surveys can result in improvements in their respective methodologies and reduce the number of overlapping questions.

Each type of survey has its strengths. The adult education participant's characteristics, educational background and current experiences, his reasons for participating in adult education and satisfactions with courses are better learned from the individual participant surveys of the Census, whereas information on organizational matters such as the institution's purposes for the programs it offers, the levels of governmental sponsorship and agency responsibility, the degree and nature of the involvement of cooperating agencies, the growth in enrollments by state, the cost of conducting programs, and the nature and number of teachers is information better sought through an institutional questionnaire. The two types of surveys thus complement and supplement each other. Together, they can give the decision-maker an excellent overall picture of the state of adult education in this country.

WHAT DOES THE FUTURE HOLD FOR ADULT EDUCATION?

There can be little question that adult education in this country is only at the beginning of a period of rapid growth. It should be remembered, however, that adult education in the public system has been experiencing a long and consistent pattern of growth ever since the turn of the century.

According to the Holden study of 1969 (reference 15), enrollments of adult students in the public schools have gone from 203,000 at the turn of the century to 6,600,000 in 1967. This means that for every one adult student enrolled in 1900, there were 32 students in 1967. Remarkably, during the same period, the population of the country did not quite triple. This means that, assuming that three of the 32 new students were there due to population growth, most of the increase in adult education enrollments has been due to spreading interest.

Adult education enrollment in the public education system has, indeed, continued to grow faster than the population. The survey whose results are presented here revealed that between 1968-69 and 1969-70, the enrollment increased 1.10 times while the number of people in the population increased 1.01 times during the same period.

During the next decade or two, it appears that enrollment in adult education in the public schools will not only continue to grow but to accelerate. This prediction can be made because of several demographic and educational patterns, all of which add up to the fact that an increasing proportion of the adult population will be educating themselves for most of their lives. In 1965, Johnstone and Rivera (reference 18) predicted tremendous growth in adult education through the 1980's.

The existence of this kind of growth is at least partly due to the fact that the babies that made up the population explosion in this country after World War II are now in their twenties and thirties and enrolling in adult education courses, but it is also because the *proportion* of 18 to 22 year olds in the population who have been attending college has more than doubled in relatively recent times. Earlier studies have shown that the correlation between an individual's attendance at college and the likelihood of his taking adult education courses at some point later in his life is very high.

Responding to these forces and, at the same time, caught in their own tight financial situation, the colleges and universities, among others, have been offering more and a greater variety of adult education courses than ever before, and at times and places convenient to the part-time casual adult student. [*Publisher's Note:* President Ford, too, has noticed the trend. On November 16, 1975, upon announcing that the week to follow would be designated American Education Week, the President urged "everyone, either informally or in the classroom setting, to take advantage of the growing opportunities for adult education in technical skills, employment skills and cultural and intellectual pursuits."]

POLICY DECISIONS REQUIRED

With the number of adults seeking formal education burgeoning, with the number of students of the traditional age levels decreasing in both secondary and postsecondary education, and with the costs of education rising, educators are faced with some difficult policy decisions, particularly if they would cater to the educational needs of the "new majority." One of the most important questions to be answered is whether adults should be taught in the same way as children and high school students and college students, or whether they should be taught differently.

There are also some larger questions in the area of adult education which we as a society must face. For example, do we wish to develop and refine and employ a national system of credentialling and evaluation that will be sophisticated enough to measure all the learning we do from childhood through grandparenthood? Or do we believe that such standardized measures are not necessary or appropriate once an individual has completed his college education?

One of the most interesting questions to consider is what direction the educational interests of adult students will take

over the next few years. The present study suggests that enrollments in the nonvocational, general education courses has been growing at a relatively greater pace than have enrollments in vocational education courses over the past few years.

The two participation surveys mentioned earlier contain quite striking evidence that the number of adult students has been increasing in proportion to the frequency that a nonvocational or nonoccupational reason has been cited for taking an adult education course. Indeed, an increasing number of adults are taking vocational courses for avocational reasons. This fact should certainly be of interest to those adult educators who design the courses. Perhaps succeeding surveys will provide us with even better information on this development. It is possible that the future will bring a rising popularity in unorthodox, nonvocational education courses for adults.

From all of this we can only conclude that forces in society augur for the expansion of adult education in the public education sector. Other questions of policy arising from the basic question of what should be the role of the public education system in the task of educating adults will be debated publicly in the years to come. At the same time, however, planners and administrators of adult education will have moved ahead, channeling funds and services into the various programs, and settling such policy questions as they go. Survey results which deal with the current situation can yield data pertinent to their decisions. Those decisions will certainly shape the future. It is hoped that surveys such as the one summarized in this report will play a useful role.

Appendix: Survey Documents

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NATIONAL CENTER FOR
EDUCATIONAL STATISTICS

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

REFER TO:
DSPA, AVSB

April 24, 1970

To: Chief State School Officer

There is a need for current, reliable statistical data about adult education in the public education system. The last survey made by the U.S. Office of Education concerning Statistics on Public School Adult Education is dated 1958-59. To help fill this information gap, the National Center for Educational Statistics is undertaking a survey based on 1968-69 and 1969-70 fiscal years.

This survey is limited to a listing of programs offered in the State and to State summaries of students enrolled and teachers employed. Information is being requested program-by-program according to funding from Federal, State, and local sources so as to provide comparability of data within the limitations of this survey.

States differ in their administration of adult education. Data about adult education in the States may come from several sources. For these reasons, you, as the head of the State education agency, are being asked to cooperate in the collection of adult education statistics for your State. Information that you submit can then be compared with that obtained from other States.

In many States all public adult education is a responsibility of the State Department of Education. Some States may place responsibility for all adult education under the agency responsible for community and junior colleges. In other States adult education, including occupational training for adults, may be under the jurisdiction of the agency responsible for vocational and technical education. In order that public adult education in your State may be completely reported, all sources of information should be contacted.

The National Council of State Directors of Adult Education has offered its cooperation for this survey of Adult Education in the Public Education System. Therefore, an information copy of this letter is being forwarded to your State Director of Adult Education. An information copy is also being forwarded to your State CEDS representative in accordance with our agreement to keep the CCSSO Committee on Educational Data Systems informed about data requests from State education agencies.

Please return the enclosed addressed postcard at your earliest convenience to notify us of the person to whom you have delegated this survey assignment.

Your cooperation and that of your staff is appreciated in providing data from which your State as well as the Nation should benefit.

Sincerely yours,

Dorothy M. Gilford

Dorothy M. Gilford
Assistant Commissioner for
Educational Statistics

2 Enclosures:
Form OE-2323
Postcard

cc: State Director of Adult Education
Representative for CEDS (Committee
on Educational Data Systems)

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF H.E.W.

U.S. Office of Education
National Center for Educational Statistics
400 Maryland Avenue, SW.
Washington, D.C. 20202

ATTENTION: Adult and Vocational Education
Surveys Branch

Budget Bureau No. 51-S70001, Approval Expires: 9/30/70

Coordinator for completion of OE Form 2323, Adult Education in the Public Education System, is: *(print or type)*

NAME *(Last, first, middle initial)*	TITLE

ADDRESS *(number, street, city, State, and ZIP code)*

TELEPHONE	AREA CODE	NUMBER	EXTENSION

DATE	SIGNATURE OF CHIEF STATE SCHOOL OFFICER

OE FORM 2323-1, 3/70 COORDINATOR FOR ADULT EDUCATION IN THE PUBLIC EDUCATION SYSTEM FORM

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

INSTRUCTIONS FOR ADULT EDUCATION IN THE PUBLIC EDUCATION SYSTEM

(OE Form 2323, 3/70)

GENERAL INSTRUCTIONS

Please read instructions before completing OE Form 2323.

Complete and return OE Form 2323 by **June 30, 1970.**

If there is need for clarification, write or telephone Imogene Okes at the address below *(telephone 202, 963-5967)*. Mail the completed form or forms in the enclosed addressed envelope to: **U.S. Office of Education, National Center for Educational Statistics, 400 Maryland Avenue, SW., Washington, D.C. 20202, Attention: Adult and Vocational Education Surveys Branch, Room 1105.**

Fill out a separate form for adult education administered in public community and junior colleges. The same form and instructions apply whether report is for elementary-secondary education agencies or for community and junior colleges.

PURPOSE

The limited objective of this 1968-69, 1969-70 survey is to secure information relating to the scope of adult education in the public education system, the extent of public school involvement, the numbers of students and teachers engaged in adult education, and general description of public adult education programs offered.

DEFINITIONS

For purposes of obtaining comparable data for this survey, the definitions below should be commonly used. Additional definitions appear in the specific instructions to clarify particular points.

Adult Education—organized instruction to meet the unique needs of persons beyond compulsory school age who have interrupted or completed their formal full-time schooling.

Public Education System—schools, at the elementary, secondary, vocational, technical, and community or junior college levels, operated or controlled under authority vested in publicly elected or appointed officials, and supported primarily by public funds.

Public School Involvement—the implication of the school in any one or all elements of education: students, teachers, subjects, facilities, equipment, funds, administration.

Program—a major agency endeavor, mission oriented, which fulfills statutory or executive requirements, and which is defined in terms of the principal actions required to achieve a significant objective.

Organized Instruction—activities arranged to enhance learning in academic and occupational courses. **INCLUDED** are high school credit courses. **EXCLUDED** are college credit courses. Activities may be of any duration. Instruction may be for any level from basic orientation to professional refresher. Activities include single class or multiple classes, workshops, seminars, institutes, lecture-discussion series, study groups, laboratories, shop courses, and other kinds of student-teacher instructional relationships.

Activity— see organized instruction.

Responsible Agency—that administrative unit which officially authorizes organized instruction and generally wholly or partially finances such instruction. The agency may fully or cooperatively implement organized instruction by providing one or more of the elements of education: students, teachers, subjects, facilities, equipment, funds, administration.

Enrollment—total number of registrations in adult education activities in the public education system.

Instructional Staff—a teacher or other staff member performing assigned duties in guiding and directing the learning experiences of persons in an instructional situation. Excluded are augmentive services such as counselors and librarians, and administrative personnel such as supervisors, principals, and clerks.

Full-time—at least 15 hours per week in instruction. This applies to both students and staff.

Part-time— less than 15 hours per week in instruction. This applies to both students and staff.

Unduplicated Count—counted only once no matter how frequent the occurrence. This applies to students, staff, and programs.

SPECIFIC INSTRUCTIONS

COLUMN (1), INSTRUCTIONAL PROGRAMS. This column is for organized instruction offered to adults through the public education system. On-job professional development workshops for teachers are included if given through the public schools. If a teacher is given leave or uses her evening or weekend time to go outside the public schools, e.g., to a State university, to attend a training seminar, workshop, or course, such program would NOT be counted as a public school sponsored adult education program. However, if a public school or school system gathered its teachers together for a non-school day session and provided the instruction to the class of teachers, this would be considered a public school adult education instructional program.

Research and development programs are NOT included. Programs for acquisition of equipment and facilities are NOT included.

Federal Programs. There are listed some adult education programs made possible through Federal funds. A key to abbreviations for Federal agencies sponsoring adult education is included at the end of the instructions. There is a space to add other federally funded adult education programs. Use continuation sheets if more space is needed. The list provided has two purposes: to permit the collection of comparable data among States, and to locate sources of adult education activities in each State.

When a program has multisponsorship, such as Federal, State and local, report it only once at time of first occurrence on the list and note cross-reference in space provided for succeeding sponsors.

When programs are combined, as for instance ABE and MDTA, report only once by primary program and note cross-reference in space for secondary program or programs.

State and Local Programs. There are two sections for you to write in adult education programs: (1) State-sponsored, and (2) locally-sponsored. Keep in mind that these listings are only for organized instructional programs in which there is some kind of public school involvement. Other activities offered through a local business, the YWCA, a sporting club, library, hospital, church, neighborhood center, or some other organization, are to be listed only if there is some public school involvement in the organized instruction provided.

State Programs are those with public school involvement under the auspices of a State authority such as State education agency, State vocational education division, State community or junior college board, State employment security office, State public health service, etc.

Local Programs are those with public school involvement fostered by the city, township, county or other local public school board, individual public school, or other local public authority.

Report State and local programs as ordinarily reported in your State. Probably this will be by target group, or subject matter, or source of funds. Please list teacher training, such as on-job professional development workshop, as a separate program.

Use continuation sheets if you need more space to report State and local programs.

COLUMNS (2) THROUGH (5), RESPONSIBLE AGENCY. These columns should be used to indicate the extent of public school involvement in adult education instructional programs. If the public school fully sponsors and administers the program, place a check mark in **Column (2).**

If the public school provides, for example, the teacher, classroom, curriculum, or funds, and another agency provides the students and administers the program, give the name of the cooperating agency in **Column (3).** If the cooperating agency supplies 50 percent or more of the funds, star (*) the agency. It is the intent of this survey to ascertain only whether cooperation exists and with whom.

If the Federal adult education program is operated completely by another agency, and the public education system is not involved, give the name of that agency in **Column (4). MAKE NO ENTRIES IN ANY OTHER COLUMNS.**

If the Federal program is not offered in your State at all, place a check mark in **Column (5).**

(continued on reverse)

COLUMNS (6) THROUGH (9), ENROLLMENT. For purposes of this survey, enrollment is the total number of registrations.

In **Column (6)**, enter total **FULL-TIME** *(at least 15 hours per week)* enrollment for each adult education program with public school involvement for the period July 1, 1968 through June 30, 1969. In **Column (7)**, enter estimated full-time enrollment for each adult education program with public school involvement for the period July 1, 1969 through June 30, 1970.

In **Columns (8)** *and* **(9)**, enter **PART-TIME** *(less than 15 hours per week)* enrollment for each program for the respective fiscal years.

Also, in the space provided at beginning of **Columns (6) through (9)**, enter the estimated **UNDUPLICATED** totals of separate individuals taking adult education — count each individual only once no matter how many classes he or she took. In the space provided at the end of the form, page 8, please indicate the process or information used to estimate unduplicated count.

COLUMNS (10) THROUGH (13), INSTRUCTIONAL STAFF. For purposes of this survey, instructional staff is a teacher or other staff member performing assigned duties in guiding and directing the learning experiences of persons in an instructional situation. Excluded are augmentive services such as counselors and librarians, and administrative personnel such as supervisors, principals, and clerks. In **Column (10)**, enter the total number of **FULL-TIME** *(at least 15 hours per week)* teaching and other instructional staff for each adult education program with public school involvement for the period July 1, 1968 through June 30, 1969. In **Column (11)**, enter the estimated number for the period July 1, 1969 through June 30, 1970.

In **Columns (12)** *and* **(13)**, enter the total number of **PART-TIME** *(less than 15 hours per week)* teaching and other instructional staff for each program for the respective fiscal years.

In the space provided at beginning of **Columns (10) through (13)**, enter the estimated **UNDUPLICATED** totals of separate individual teaching and other instructional staff members — count each person only once no matter how many classes he or she taught. In the space provided at the end of the form, page 8, indicate the process or information used to estimate unduplicated count.

COLUMNS (14) THROUGH (18), DESCRIPTION OF PROGRAM. Place a check mark in all the columns that apply to each adult education program with public school involvement and star the primary purpose.

Column (14), Basic Education includes Adult Basic Education as normally taught in grades 1 through 8, with emphasis usually on reading, writing, arithmetic, and social skills. Basic education also includes Americanization programs for immigrants such as American Government and English for Foreigners.

Column (15), High School or GED includes programs offering courses normally taught in grades 9 through 12 to prepare the student for a high school diploma or equivalent, as well as remedial work for the General Education Development (GED) examinations.

Column (16), Occupational Training includes all skill instructional programs whether preparatory for a new job or supplementary for advancement or improvement in a present job or to change jobs. Instruction may be for any level from basic orientation to professional refresher.

Column (17), General and College Subjects may include all academic subjects for general or cultural information, civic and public affairs, safety, home and family living, personal development, and similar topics. Activities may be of any duration from a few hours to multisemester. Noncredit academic programs in community or junior colleges should be entered here.

Column (18), Other. Include lessons in hobbies and handicrafts, sports lessons, and recreational lessons here. Please identify briefly.

Be sure totals are computed for each section and for all sections of the survey form. When totalling all Federal, State, and local programs, please enter UNDUPLICATED count of programs — count a program only once even though it may be multisponsored or combined.

KEY TO ABBREVIATIONS OF FEDERAL AGENCIES FUNDING ADULT EDUCATION PROGRAMS

Ag - Department of Agriculture
AOA - Administration on Aging
BIA - Bureau of Indian Affairs
Bur. Prisons - Bureau of Prisons
Defense - Department of Defense
Extension Service - Federal Extension Service
HEW - Department of Health, Education, and Welfare
Interior - Department of Interior
Justice - Department of Justice
Labor - Department of Labor
Law Enforcement Asst. - Office of Law Enforcement Assistance
OE - U.S. Office of Education
OEO - Office of Economic Opportunity
PHS - Public Health Service
RSA - Rehabilitation Services Administration *(formerly Vocational Rehabilitation)*
Small Business Admin. - Small Business Administration
SRS - Social and Rehabilitation Service

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

ADULT EDUCATION IN THE PUBLIC EDUCATION SYSTEM, 1968-69 and 1969-70

Please read instructions before completing this form. Use continuation sheets if you need more space to report instructional programs.

BUDGET BUREAU NO. 51-S70001
APPROVAL EXPIRES: 9/30/70
REPORTING DATE: June 30, 1970

CHECK OR SPECIFY SOURCES CONTACTED TO PROCURE DATA ABOUT ADULT EDUCATION IN THE PUBLIC EDUCATION SYSTEM

SOURCES	CONTACTED	NOT CONTACTED	NOT APPLICABLE	OTHER SOURCES (Specify)	CONTACTED	NOT CONTACTED	NOT APPLICABLE
STATE EDUCATION AGENCY							
STATE VOCATIONAL EDUCATION DIVISION							
STATE COMMUNITY AND JUNIOR COLLEGE BOARD							

CHECK THE ADMINISTERING AGENCY FOR ADULT EDUCATION ACTIVITIES REPORTED ON THIS FORM

☐ ELEMENTARY AND SECONDARY SCHOOLS

☐ COMMUNITY AND JUNIOR COLLEGES

CHECK NUMBER OF FORMS SUBMITTED ☐ 1 ☐ 2 FOR STATE OF

PERSON COMPLETING THIS FORM

NAME

TITLE

ADDRESS (Number, street, city, State, and ZIP code)

TELEPHONE | AREA CODE | NUMBER | EXTENSION

INSTRUCTIONAL PROGRAMS	RESPONSIBLE AGENCY (Check or specify as appropriate)				ENROLLMENT				INSTRUCTIONAL STAFF				DESCRIPTION OF PROGRAM (Check all that apply and star the primary purpose)				
					FULL-TIME		PART-TIME		FULL-TIME		PART-TIME						
FEDERAL, STATE AND LOCAL	FULLY SPONSORED BY PUBLIC EDUCATION SYSTEM	COOPERATIVELY OFFERED WITH ANOTHER AGENCY (Specify agency)*	OPERATED BY OTHER AGENCY (Specify agency) (Make no entries in any other columns)	NOT OFFERED IN THIS STATE	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	BASIC EDUCATION	HIGH SCHOOL OR GED	OCCUPATIONAL TRAINING	GEN. AND COLLEGE SUBJECTS	OTHER (Specify)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
ALL FEDERAL, STATE AND LOCAL PROGRAMS - TOTAL																	
TOTAL ESTIMATED UNDUPLICATED COUNT OF PERSONS IN ALL PROGRAMS																	
FEDERAL PROGRAMS - TOTAL																	
TOTAL ESTIMATED UNDUPLICATED COUNT OF PERSONS IN FEDERAL PROGRAMS																	
FEDERAL PROGRAMS (See Key to abbreviations)																	
1. Adult Basic Education - OE, DHEW																	
2. Adult Vocational Education - OE, DHEW																	
3. Civil Defense Adult Education - OE, Defense																	
4. Manpower Development and Training - OE, Labor																	
5. Medical Self-Help Training - PHS, DHEW																	
6. Training of Workers with Older Americans - Admin. on Aging, SRS, DHEW																	

OE FORM 2323, 3/70

*Star when cooperating agency supplies 50 percent or more of funds.

(continued on reverse)

INSTRUCTIONAL PROGRAMS	RESPONSIBLE AGENCY (Check or specify as appropriate)				ENROLLMENT				INSTRUCTIONAL STAFF				DESCRIPTION OF PROGRAM (Check all that apply and star the primary purpose)				
					FULL-TIME		PART-TIME		FULL-TIME		PART-TIME						
FEDERALLY SPONSORED	FULLY SPONSORED BY PUBLIC EDUCATION SYSTEM	COOPERATIVELY OFFERED WITH ANOTHER AGENCY (Specify agency)*	OPERATED BY OTHER AGENCY (Specify agency) (Make no entries in any other columns)	NOT OFFERED IN THIS STATE	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	BASIC EDUCATION	HIGH SCHOOL OR GED	OCCUPATIONAL TRAINING	GEN. AND COLLEGE SUBJECTS	OTHER (Specify)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
FEDERAL PROGRAMS (Continued)																	
7. Training of Senior Citizens as School Aides - AOA, SRS, DHEW																	
8. Self-support Education and Training for Parents - Community Services Administration, SRS, DHEW																	
9. WIN (Work Incentive Program) - Community Services Administration, SRS, DHEW/Labor																	
10. Vocational Rehabilitation for Physically and Mentally Handicapped - RSA, SRS, DHEW																	
11. Cuban Refugee Program - SRS, DHEW																	
12. Agriculture and Home Economics Education - Extension Service, Agriculture																	
13. Armed Forces Off-duty Voluntary Educ. Program for Military Personnel: Air Force, Army, Navy, and Marines - Defense																	
14. Project 100,000 - Defense																	
15. Project Transition (for military personnel going into civilian life) - Defense																	
16. American Indians Adult Education and Employment Assistance - BIA, Interior																	
17. Citizenship Education and Training - Immigration and Naturalization Service, Justice																	
18. Federal Prisoners Educational and Vocational Training - Bureau of Prisons, Justice																	
19. Training in Corrections, Criminal Justice, Law Enforcement - Law Enforcement Assistance, Justice																	
20. Neighborhood Youth Corps - Labor, OEO																	

*Star when cooperating agency supplies 50 percent or more of funds.

(continued on reverse)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

ADULT EDUCATION IN THE PUBLIC EDUCATION SYSTEM, 1968-69 and 1969-70
(Continued)

CHECK THE ADMINISTERING AGENCY FOR ADULT EDUCATION ACTIVITIES REPORTED ON THIS FORM
- ☐ ELEMENTARY AND SECONDARY SCHOOLS
- ☐ COMMUNITY AND JUNIOR COLLEGES

FOR STATE OF

BUDGET BUREAU NO. 51-S70001
APPROVAL EXPIRES 9 30 70

REPORTING DATE
June 30, 1970

INSTRUCTIONAL PROGRAMS	RESPONSIBLE AGENCY *(Check or specify as appropriate)*				ENROLLMENT				INSTRUCTIONAL STAFF				DESCRIPTION OF PROGRAM *(Check all that apply and star the primary purpose)*				
					FULL-TIME		PART-TIME		FULL-TIME		PART-TIME						
FEDERALLY SPONSORED	FULLY SPONSORED BY PUBLIC EDUCATION SYSTEM	COOPERATIVELY OFFERED WITH ANOTHER AGENCY *(Specify agency)**	OPERATED BY OTHER AGENCY *(Specify agency) (Make no entries in any other columns)*	NOT OFFERED IN THIS STATE	1968-69	1969-70 *(Estimated)*	1968-69	1969-70 *(Estimated)*	1968-69	1969-70 *(Estimated)*	1968-69	1969-70 *(Estimated)*	BASIC EDUCATION	HIGH SCHOOL OR GED	OCCUPATIONAL TRAINING	GEN. AND COLLEGE SUBJECTS	OTHER *(Specify)*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
FEDERAL PROGRAMS *(Continued)*																	
21. New Careers – Labor/OEO																	
22. Operation Mainstream – Labor, OEO																	
23. Job Corps Training for Young Men and Women – OEO 68-69/Labor 69-70																	
24. Migrant and Seasonal Farm Workers – OEO																	
25. Community Action Program – OEO																	
26. VISTA – OEO																	
27. Management Development and Training – Small Business Administration																	
Other Federal Programs *(Specify)*																	
28.																	
29.																	
30.																	
31.																	

OE FORM 2323, 3-70

*Star when cooperating agency supplies 50 percent or more of funds.

(continued on reverse)

INSTRUCTIONAL PROGRAMS	RESPONSIBLE AGENCY (Check or specify as applicable)				ENROLLMENT				INSTRUCTIONAL STAFF				DESCRIPTION OF PROGRAM (Check all that apply, and star the primary purpose)				
					FULL-TIME		PART-TIME		FULL-TIME		PART-TIME						
FEDERALLY SPONSORED	FULLY SPONSORED BY PUBLIC EDUCATION SYSTEM	COOPERATIVELY OFFERED WITH ANOTHER AGENCY (Specify agency)*	OPERATED BY OTHER AGENCY (Specify agency) (Make no entries in any other columns)	NOT OFFERED IN THIS STATE	1955-56	1959-60 (Estimated)	1955-56	1959-60 (Estimated)	1955-56	1959-60 (Estimated)	1955-56	1959-60 (Estimated)	BASIC EDUCATION	HIGH SCHOOL OR GED	OCCUPATIONAL TRAINING	GEN. AND COLLEGE SUBJECTS	OTHER (Specify)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)

*Star when cooperating agency supplies 50 percent or more of funds.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

ADULT EDUCATION IN THE PUBLIC EDUCATION SYSTEM, 1968-69 and 1969-70
STATE SPONSORED PROGRAMS

CHECK THE ADMINISTERING AGENCY FOR ADULT EDUCATION ACTIVITIES REPORTED ON THIS FORM
- ☐ ELEMENTARY AND SECONDARY SCHOOLS
- ☐ COMMUNITY AND JUNIOR COLLEGES

FOR STATE OF: 1

BUDGET BUREAU NO. 51-570001
APPROVAL EXPIRES: 9 30 70

REPORTING DATE: June 30, 1970

INSTRUCTIONAL PROGRAMS	RESPONSIBLE AGENCY (Check or specify as appropriate)				ENROLLMENT				INSTRUCTIONAL STAFF				DESCRIPTION OF PROGRAM (Check all that apply and star the primary purpose)				
					FULL-TIME		PART-TIME		FULL-TIME		PART-TIME						
STATE SPONSORED	FULLY SPONSORED BY PUBLIC EDUCATION SYSTEM	COOPERATIVELY OFFERED WITH ANOTHER AGENCY (Specify agency)*	OPERATED BY OTHER AGENCY (Specify agency) (Make no entries in any other columns)	NOT OFFERED IN THIS STATE	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	BASIC EDUCATION	HIGH SCHOOL OR GED	OCCUPATIONAL TRAINING	GEN. AND COLLEGE SUBJECTS	OTHER (Specify)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
STATE PROGRAMS - TOTAL																	
TOTAL ESTIMATED UNDUPLICATED COUNT OF PERSONS																	
STATE PROGRAMS (Specify)																	

OE FORM 2323, 3/70

*Star when cooperating agency supplies 50 percent or more of funds.

(continued on reverse)

INSTRUCTIONAL PROGRAMS	RESPONSIBLE AGENCY (Check or specify as appropriate)				ENROLLMENT				INSTRUCTIONAL STAFF				DESCRIPTION OF PROGRAM (Check all that apply and star the primary purpose)				
					FULL-TIME		PART-TIME		FULL-TIME		PART-TIME						
STATE SPONSORED	FULLY SPONSORED BY PUBLIC EDUCATION SYSTEM	COOPERATIVELY OFFERED WITH ANOTHER AGENCY (Specify agency)*	OPERATED BY OTHER AGENCY (Specify agency) (Make no entries in any other columns)	NOT OFFERED IN THIS STATE	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	BASIC EDUCATION	HIGH SCHOOL OR GED	OCCUPATIONAL TRAINING	GEN. AND COLLEGE SUBJECTS	OTHER (Specify)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)

*Star when cooperating agency supplies 50 percent or more of funds.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

ADULT EDUCATION IN THE PUBLIC EDUCATION SYSTEM, 1968-69 and 1969-70
LOCALLY SPONSORED PROGRAMS

CHECK THE ADMINISTERING AGENCY FOR ADULT EDUCATION ACTIVITIES REPORTED ON THIS FORM
- ☐ ELEMENTARY AND SECONDARY SCHOOLS
- ☐ COMMUNITY AND JUNIOR COLLEGES

FOR STATE OF

BUDGET BUREAU NO. 51-S19001
APPROVAL EXPIRES: 9 30 70

REPORTING DATE
June 30, 1970

INSTRUCTIONAL PROGRAMS	RESPONSIBLE AGENCY (Check or specify as appropriate)				ENROLLMENT				INSTRUCTIONAL STAFF				DESCRIPTION OF PROGRAM (Check all that apply, and star the primary purpose)				
					FULL-TIME		PART-TIME		FULL-TIME		PART-TIME						
LOCALLY SPONSORED	FULLY SPONSORED BY PUBLIC EDUCATION SYSTEM	COOPERATIVELY OFFERED WITH ANOTHER AGENCY (Specify agency)*	OPERATED BY OTHER AGENCY (Specify agency) (Make no entries in any other columns)	NOT OFFERED IN THIS STATE	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	1968-69	1969-70 (Estimated)	BASIC EDUCATION	HIGH SCHOOL OR GED	OCCUPATIONAL TRAINING	GEN. AND COLLEGE SUBJECTS	OTHER (Specify)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
LOCAL PROGRAMS - TOTAL																	
TOTAL ESTIMATED UNDUPLICATED COUNT OF PERSONS																	
LOCAL PROGRAMS (Specify)																	

OE FORM 2323, 3/70

*Star when cooperating agency supplies 50 percent or more of funds.

(continued on reverse)

INSTRUCTIONAL PROGRAMS	RESPONSIBLE AGENCY (See page 7 for definitions)				ENROLLMENT				INSTRUCTIONAL STAFF				DESCRIPTION OF PROGRAM (Check all that apply and use the primary purpose)				
					FULL-TIME		PART-TIME		FULL-TIME		PART-TIME						
LOCALLY SPONSORED	FULLY SPONSORED BY PUBLIC EDUCATION SYSTEM	COOPERATIVELY OPERATED WITH ANOTHER AGENCY (Specify agency)*	OPERATED BY OTHER AGENCY (Specify agency) (Make no entries in any other columns)	NOT OFFERED IN THIS STATE	Females	Males (Estimated)	Females	Males (Estimated)	Females	Males (Estimated)	Females	Males (Estimated)	BASIC EDUCATION	HIGH SCHOOL DIPLOMA OR GED	OCCUPATIONAL TRAINING	GENERAL COLLEGE SUBJECTS	OTHER (Specify)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)

THE FOLLOWING PROCESS OR INFORMATION WAS USED TO ESTIMATE UNDUPLICATED COUNT OF PERSONS ENROLLED IN ADULT EDUCATION ACTIVITIES:

THE FOLLOWING PROCESS OR INFORMATION WAS USED TO ESTIMATE UNDUPLICATED COUNT OF INSTRUCTIONAL STAFF FOR ADULT EDUCATION:

*Star when cooperating agency supplies 50 percent or more of funds.

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Glossary

This glossary is included as an aid to the general reader. Terms which were used in the survey questionnaire and which appear in the tables are defined here according to their survey definition, as indicated. Readers interested in reading the exact definitions as they appeared in the survey form should turn to pp. 139-140, where the survey form has been reprinted.

Adult basic education. Instruction for adults in the curriculum of grades 1 through 8, with emphasis on reading, writing, arithmetic and social skills. Such education often includes courses for immigrants seeking to adjust to life in the United States. Most adult basic education courses are offered at high schools in the evening.

Adult Basic Education (ABE) is also the name of a federally funded program administered by the Office of Education's Division of Adult Education. The program was created by the Adult Education Act of 1966.

(Survey definition) Organized instruction for needs of persons beyond compulsory school age who have interrupted or completed their full-time schooling. See also **Public adult education.**

Basic education. See **Adult basic education.**

Combined programs. When a public agency or institution (such as an elementary or secondary school or public community or junior college) offers a single adult education course while using funds from two or more state, local or federal programs, these programs are called "combined." Some schools, for example, combine funds from two federal programs, Adult Basic Education and Manpower Development Training, to offer a single course.

Cooperatively-offered. A program is cooperatively-offered if more than one institution is involved in its administration. Administertion is used here to include the providing of students, teachers, facilities, funds, curriculum, or equipment.

A multi-sponsored program (that is, a program whose costs are covered by more than one source of funds) is not necessarily a cooperatively-offered program. For example, a federal program may be solely administered by a school district. See also **Multi-sponsorship.**

Cosponsorship. A program is co-sponsored if it is funded by two levels of government (federal, state or local). See also **Cooperatively-offered** and **Multi-sponsorship.**

Duplication. In the context of statistical surveys, duplication refers to the situation when a survey attempting to count the number of individual participants has been unable to avoid counting a certain, usually unknown, number of individuals twice.

Duplication occurs, for example, when a school keeping the enrollment records (on which the survey is based) adds together the number of students enrolled in all the courses offered during a semester to arrive at the total enrollment figure. In such a case, all students who took more then one course would appear in the count as two or three students, depending on the number of courses they had taken.

Enrollment. (Survey definition) The total number of persons registered to take one or more classes offered by a public education agency such as a school, school district, or public community college. See also **Duplication.**

Federal program. (Survey definition) This term may refer either to the federal office which administers the funds available for that program's purpose or to the program as it exists in the local jurisdiction, supported by the federal funds.

Throughout this survey report, the term is used to distinguish between the different types of publicly funded programs. Public funds are available from only three sources: the federal government, the state government and the local government (or local school district). See also **Sponsorship.**

NB: The 27 selected federal programs, on which this survey gathered complete data, are described on pp. 18-20.

Full-time. (Survey definition) As used here, a student or instructor who receives or teaches at least 15 hours of instruction per week.

GED Test. GED stands for General Educational Development. The GED Test is designed to measure whether the person taking the test possesses the skills and understands the concepts usually learned during four years of high school education. Originally developed by the United States Armed Forces in 1942 as a means to determine whether World War II veterans who had not graduated from high school–nevertheless possessed enough education to enter college, the GED Tests are now taken by the

general public and are nearly always accepted by colleges and universities as equivalent to a high school diploma.

The GED Test is administered by the GED Testing Service, which is part of the Office of Educational Credit in the American Council of Education in Washington, D.C. Many educational institutions across the country have been approved as Official GED Testing Centers.

General or college subjects. (Survey definition) Only noncredit courses were counted. The category, (within that limitation) includes all academic subjects usually taught in college as well as courses on cultural information, civic and public affairs, safety, home and family living, personal development, etc.

Courses offered at public community and public junior colleges for noncredit which fit this definition were counted in this category.

Instructional Staff. (Survey definition) Teachers or other staff members whose assigned duties include the guiding and directing of students in adult education courses. Not counted as members of the instructional staff were the following: counselors, librarians, and administrative personnel such as supervisors, principals and clerks.

Local Program. An adult education program whose source of funding is a city, township or county government, a local school board, individual public school or other local public authority. See also **Sponsorship.**

Multi-sponsorship. A program is multi-sponsored if it is funded by two or more levels of government (federal, state or local). In cases of multi-sponsorship, survey respondents were instructed to enter the program as being sponsored by the level of government which appeared first on the survey form. The survey form addressed federal programs first, state programs second and local programs third.

Occupational training. Training which prepares an individual for a new job, improves his or her ability to do their present job, or provides him or her with skills they need to receive a promotion. Such training is often available through an adult education program. The level of instruction can range from basic to highly specialized.

Organized instruction. (Survey definition) An academic or occupational course of any duration and taught at any level, from basic to professional refresher. These courses include workshops, seminars, institutes, lecture discussion series, study groups, laboratories, and shop courses. High school courses (for credit) were counted but college courses (for credit) were not.

Other adult education programs or courses. (Survey definition) A course or program which deals with recreational subjects such as hobbies, handicrafts, sports lessons, etc. This category was used in conjunction with four others: basic education, high school credit, occupational training and general and college subjects. This glossary contains definitions for all except the high school credit category.

Part-time. (Survey definition) The term is used to describe a student or staff member who participates in organized instruction for less than 15 hours a week.

Public adult education. Adult education available through the public education system (this includes elementary, secondary and two-year postsecondary education).

Public school involvement. This state is considered to exist when a school has contributed one or more of the following elements: students, teachers, course content, facilities, funds, equipment, or administration.

Primary program. (Survey definition) When a particular adult education course is operated through the use of funds from more than one program of the same governmental level of sponsorship, then the primary program is said to be the program which contributes the greatest percentage of funds.

Sponsorship. (Survey definition) A course's or program's sponsor is the government (federal, local or state) which is paying for the costs of the course or program. In instances where a course's or program's costs are being covered by more than one sponsor, the course or program is described as "multi-sponsored." See **Multi-sponsorship.**

State program. An adult education program whose source of funding is a state authority such as the state education agency, the state vocational education division, the state community or junior college board, the state employment security office or the state public health service.

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